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120TH STREET - STONEGATE TO FORT STREET
CITY OF OMAHA, DOUGLAS COUNTY, NEBRASKA

DRAFT ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to 42 USC 4332(2)(c) and 23 CFR 771 & 774


To

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By

CITY OF OMAHA AND NEBRASKA DEPARTMENT OF ROADS

Project sponsor signatures indicate verification that the content of this document and the scope of the Project are accurate. FHWA signature gives approval to distribute this information for public and agency review and comment. Such approval does not commit to approve any future grant requests to fund the preferred alternative.


For the Nebraska Division Administrator
Federal Highway Administration

5/4/17
Date


For the Nebraska Department of
Roads
Project Sponsor

5/2/17
Date


For the City of Omaha
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LIST OF ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
AADT	Average Annual Daily Traffic
APE	Area of Potential Effect
BMPs	Best Management Practices
CEQ	Council on Environmental Quality
CIP	Capital Improvement Program
COC	Chemicals of Concern
CSW	Construction Stormwater
CWA	Clean Water Act
dba	Decibel
DOT Act	Department of Transportation Act of 1966
DOT	Department of Transportation
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act of 1973, as amended
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
HAP	Highway Archaeology Program
HEI	Health Effects Institute
I-680	Interstate 680
Leq(h)	Hourly Equivalent Sound Level
LUST	Leaking Underground Storage Tank
LOC	Limits of Construction
LRTP	Long Range Transportation Plan
LWCF	Land and Water Conservation Fund
MAPA	Metropolitan Area Planning Agency
MBTA	Migratory Bird Treaty Act of 1918
MPO	Metropolitan Planning Organization

MSAT	Mobile Source Air Toxics
MSA	Metropolitan Statistical Area
MS4	Municipal Separate Storm Sewer System
MSE	Mechanically Stabilized Earth
MUD	Metropolitan Utilities District
NAC	Nebraska Administrative Code
NDEQ	Nebraska Department of Environmental Quality
NDOR	Nebraska Department of Roads
NEPA	National Environmental Policy Act
NESCA	Nebraska Nongame and Endangered Species Conservation Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NeSHPO	Nebraska State Historic Preservation Office
NFA	No Further Action
NGPC	Nebraska Game and Parks Commission
NHPA	National Historic Preservation Act
NOI	Notice Of Intent
NPDES	National Pollutant Discharge and Elimination System
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWCA	Nebraska Weed Control Association
NWP	Nationwide Permit
OHW	Ordinary High Water
PD/ESF	Proposal Description/Environmental Screening Form
Project	Proposed 120 th Street improvement project
Q&A	Question and Answer
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Conditions
ROW	Right-of-way
Schemmer	The Schemmer Associates Inc.
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
Study Area	Environmental Study Area extending from Stonegate Drive (800 feet south of the construction limits at Emmet Street) to Fort Street (approximately 0.25 mile north of the construction limits at Roanoke Boulevard).
SWPPP	Storm Water Pollution Prevention Plan

Tetra Tech	Tetra Tech, Inc.
TIP	Transportation Improvement Program
Title VI	Title VI of the Civil Rights Act of 1964
TMDLs	Total Maximum Daily Loads
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	US Fish and Wildlife Service
UST	Underground Storage Tanks
VMT	vehicle miles traveled

I. INTRODUCTION

A. Executive Summary

The Federal Highway Administration (FHWA), the City of Omaha, and the Nebraska Department of Roads (NDOR) propose improving 120th Street from approximately Stonegate Drive to Roanoke Boulevard in the City of Omaha. The proposed improvement would include, among other things, widening the right-of-way (ROW) to accommodate additional lanes and the replacement of a bridge over Big Papillion Creek. The proposed 120th Street Project (hereafter referred to as 'Project') is being developed as a federal-aid project with FHWA as the lead federal agency.

This Draft Environmental Assessment (DEA) has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969 according to FHWA guidance (23 Code of Federal Regulations [CFR] 771, Technical Advisory T-6640.8A) for preparing environmental documents. According to FHWA guidance, analysis is required only for those impacts whose significance is uncertain; therefore, only relevant resource categories, and not every possible resource category, have been addressed. The primary purpose of the EA is to help FHWA determine if the proposed project would result in less than significant environmental impacts and warrant a Finding of No Significant Impact or result in significant environmental impacts that would require preparation of an Environmental Impact Statement.

B. Location

The Project is located in northwestern Omaha between Stonegate Drive and Roanoke Boulevard along 120th Street in Township 15 North, Range 12 East, Sections 5, 6, 7, and 8, in Douglas County, Nebraska (**Figure 1**). The Project is located in northwest Omaha, immediately north of the Woodlyn Park neighborhood in a relatively urban area. The Environmental Study Area (Study Area) for the Project extends from Stonegate Drive (800 feet south of the construction limits at Emmet Street) to Fort Street (approximately 0.25 mile north of the construction limits at Roanoke Boulevard).

In addition to the high-density residential areas located southwest of the intersection of 120th Street and West Maple Road in the Study Area, a variety of retail businesses are located along 120th Street including:

- A horticultural nursery with associated structures and a bar/restaurant located northwest of the intersection of Roanoke Boulevard and 120th Street;
- A restaurant and gas station located north of Roanoke Boulevard on the east side of 120th Street;
- A horticultural nursery with associated structures located southeast of the intersection of West Maple Road and 120th Street;
- A gas station, car wash, auto repair shop, restaurant, salon, auto parts store, office buildings, and other retail properties located southwest of the intersection of 120th Street and West Maple Road; and a bank, an insurance office, and other retail properties located immediately north of Stonegate Drive on the east side of 120th Street.

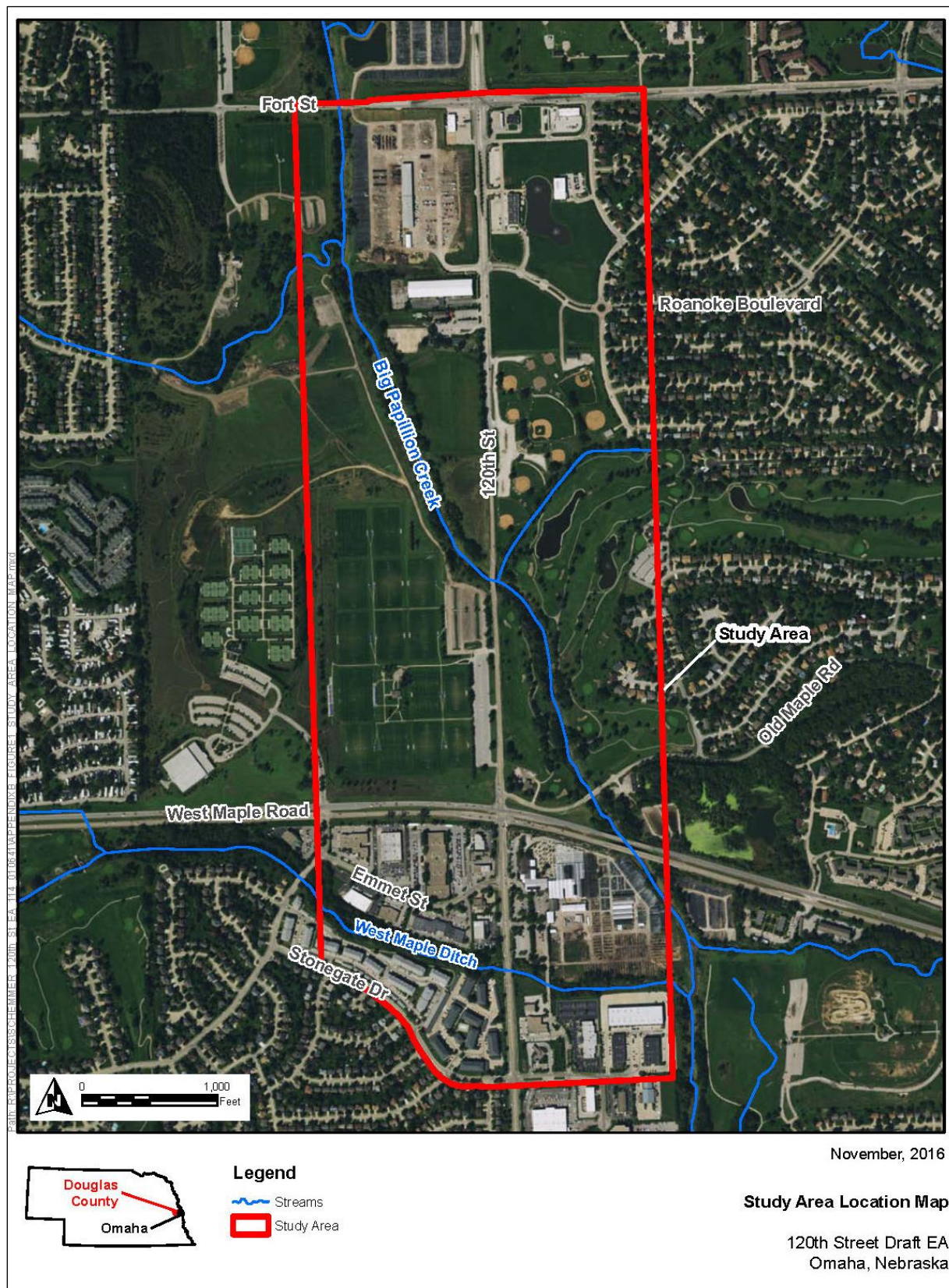


Figure 1. Study Area Location Map

Amenities in the Study Area include the City of Omaha's 340-acre Tranquility Park, located west of 120th Street between West Maple Road and the Big Papillion Creek. The park includes 8 baseball fields, 17 soccer fields, and 24 tennis courts. The City of Omaha's The Knolls Golf Course is also located within the Study Area on the east side of 120th Street north of Old Maple Road. The 18-hole, championship rated golf course has four lakes and a creek running through the course. Three privately-owned recreation facilities occur in the Study Area between Roanoke Boulevard and Big Papillion Creek: Schmidley's Family Golf Range, the Keystone Little League baseball fields, and The Tennis Club and Soccer Center.

C. Project Background and Overview

The Omaha/Council Bluffs Metropolitan Area Planning Agency (MAPA) is the designated Metropolitan Planning Organization (MPO) for the Omaha, Nebraska/Council Bluffs metro area (MAPA, 2010). MAPA is responsible for the creation and maintenance of a Long Range Transportation Plan (LRTP), consisting of five counties in Nebraska and Iowa. MAPA identifies 120th Street as a road that would aid in the future traffic flow within the city as it is a road that links major city arterial roadways (MAPA, 2010). In the 2010 LRTP, MAPA identified the portion of 120th Street included in the Study Area as a road that would need improvements from a two-lane rural roadway to a four-lane urban roadway (divided with turn lanes) to address existing and future needs (MAPA, 2010). In 2016, MAPA released an amendment to the 2040 LRTP; the 120th Stonegate to Fort Street project is listed in the 2040 LRTP among the 2020-2025 funding estimates (MAPA, 2016a).

The current width and road design of 120th Street in the Study Area varies throughout the one-mile stretch that the proposed project would improve (see **Figure 2**). The existing roadway from Stonegate Drive to Emmet Street is a four-lane roadway with sidewalks and curb-and-gutter. The roadway then transitions to a five-lane roadway with a raised median, sidewalks, and curb-and-gutter from Emmet Street to West Maple Road. From West Maple Road to Roanoke Boulevard, 120th Street is a two-lane roadway with open drainage and no curb-and-gutter or sidewalks. The existing segment of 120th Street north of Roanoke Boulevard to Fort Street has previously been widened to four lanes with a raised median. The existing pavement along much of 120th Street in the Study Area is aged, patched, and rough, and is near the end of its useful life.

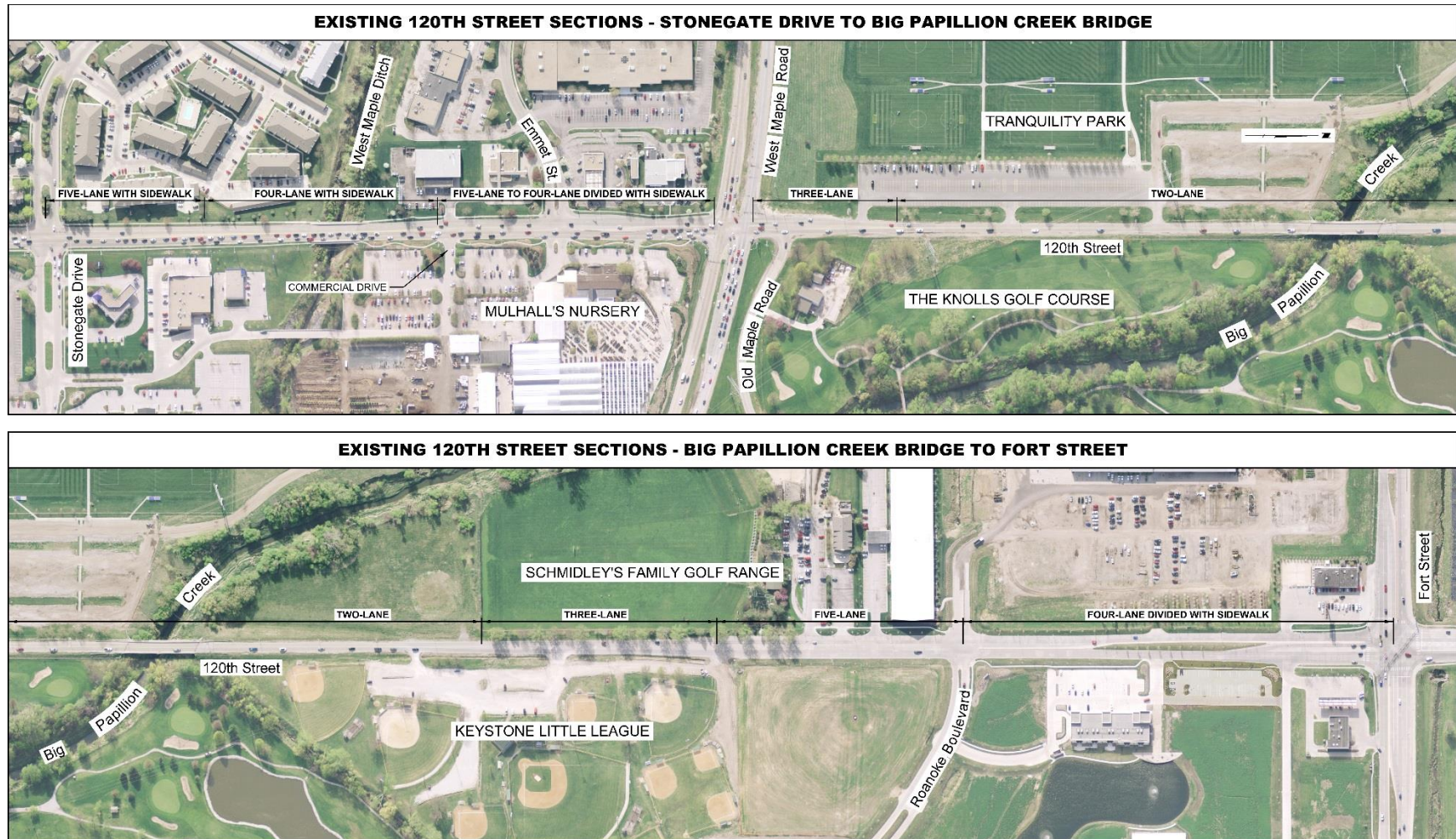


Figure 2. Existing 120th Street Sections

II. PROJECT PURPOSE AND NEED

A. Project Study Area

The City of Omaha needs to provide an adequate network of city arterials that carry local traffic to the surrounding highway and local street network. Commercial and residential growth in the northwest portion of Omaha has substantially increased traffic volumes along the 120th Street corridor. Interchanges for Interstate 680 (I-680) are located east of 120th Street at both West Maple Road and Fort Street. To accommodate the growth in traffic, and to enhance safety along the corridor, the City of Omaha plans to improve 120th Street for approximately one mile from a southern terminus at Stonegate Drive to a northern terminus at Fort Street (the Study Area). The Study Area is shown in **Figure 1**. This segment of 120th Street is identified on the Federal Functional Classification System as a minor arterial. The City of Omaha plans to develop the Project with funding support from the FHWA.

120th Street serves as a north-south minor arterial for those living and/or working in northwest Omaha. Currently, there are few major traffic generators along this roadway section other than the existing office park southwest of the intersection of 120th Street and West Maple Road. Additional traffic generators contributing to traffic volumes include retail sites and residential neighborhoods north of West Maple Road, additional retail sites east and west of the Study Area, and the I-680 interchanges at Fort Street and West Maple Road, located approximately 1.5 miles from the Study Area. The existing recreation areas along both sides of 120th Street generate additional traffic primarily during non-peak hours. The majority of traffic along the Project corridor is through-traffic, generated by motorists traveling through the area.

Figure 3 is a schematic diagram of existing roadway conditions within the study area. The existing section of 120th Street south of the Study Area is a five-lane (four through-lanes and a center two-way left-turn lane) facility with sidewalks and curb-and-gutter. The existing roadway segment of 120th Street from Stonegate Drive to the intersection with West Maple Road varies in width. The roadway has four through-lanes with a southbound left-turn lane at the intersection of Stonegate Drive. North of Stonegate Drive to south of Emmet Street the roadway narrows to a four-lane section through the bridge over West Maple Ditch. The roadway widens to five lanes (four through-lanes and a center two-way left-turn lane) at approximately 300 feet south of Emmet Street. The roadway then transitions to a four-lane section divided by a raised median north of Emmet Street. The outside northbound lane becomes an exclusive right turn lane at West Maple Road. Sidewalks exist on both the west and east sides of 120th Street from Stonegate Drive to West Maple Road. Commercial properties border the roadway between Stonegate Drive and West Maple Road. North of West Maple Road, recreational areas border the roadway. Old Maple Road, which intersects 120th Street immediately north of West Maple Road, serves as a primary exit and entrance to an established neighborhood and recreational facilities (an 18-hole golf course and a 25-acre nature preserve). Existing 120th Street north of West Maple Road to Roanoke Boulevard is a two-lane roadway with open drainage and no curb-and-gutter or sidewalks. Roanoke Boulevard serves as a primary exit and entrance to an established neighborhood and commercial development. From north of Roanoke Boulevard to Fort Street, 120th Street is four lanes wide with a raised median in parts of the segment. The intersecting roadways of West Maple Road and Fort Street are multi-lane roadways.

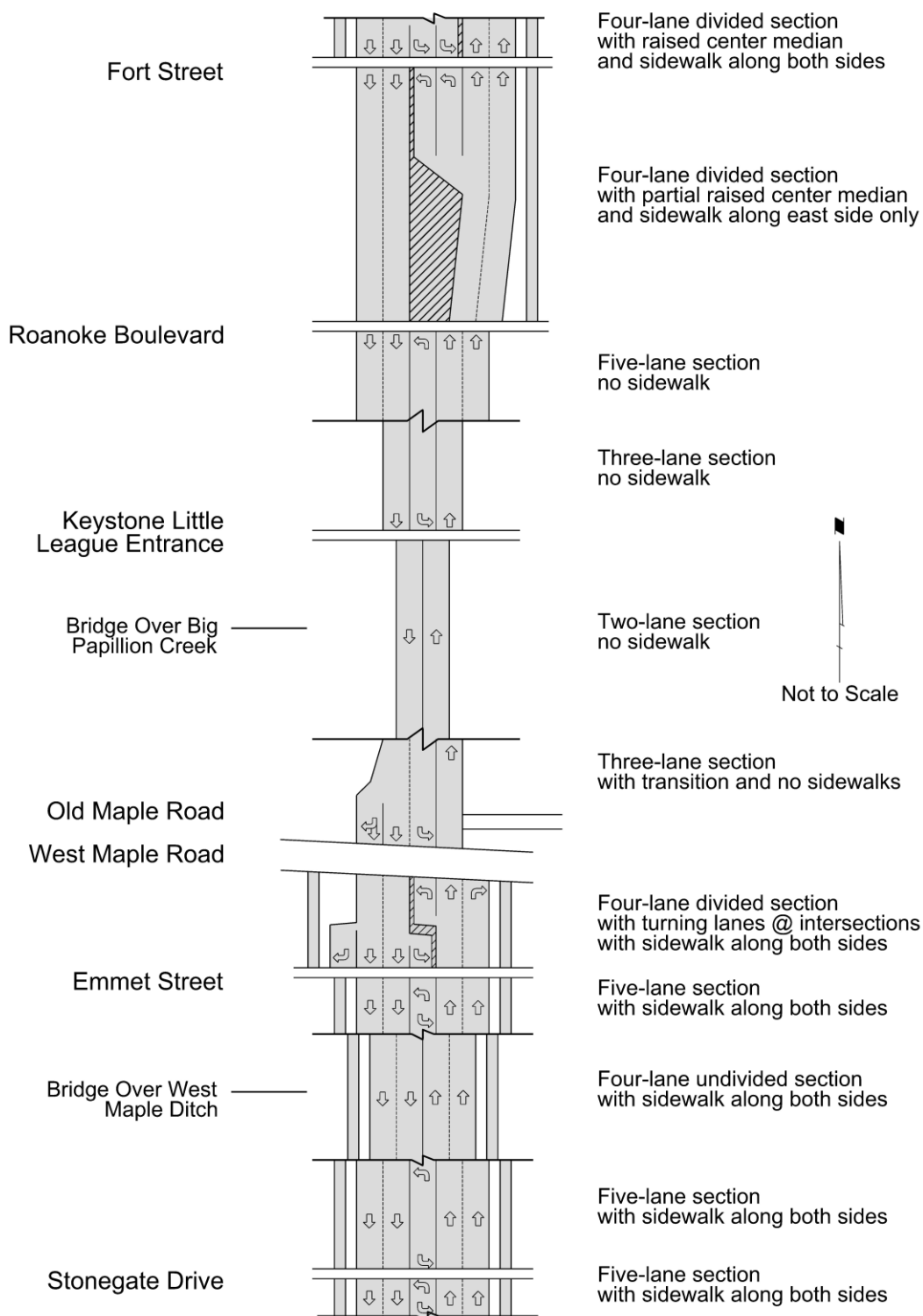


Figure 3. Existing Roadway Schematic

The termini for the proposed Project are Fort Street on the north to Stonegate Drive on the south. Fort Street was identified as the northern terminus because it is the next arterial intersection beyond the proposed roadway improvement. In addition, existing land uses transition from developed residential/commercial south of Fort Street, to agricultural/rural lands north of Fort Street. The intersection of Stonegate Drive and 120th Street was determined to be the southern project terminus, as it provides a reasonable transition point between the existing five-lane roadway south of Stonegate Drive and the proposed four-lane, median-divided roadway.

B. Purpose of Project

The purpose of this project is to improve the consistency of 120th Street's roadway section, continuity of pedestrian facilities, to address roadway capacity and enhance safety to accommodate projected future traffic demands.

C. Need for Project

Lack of Roadway Section Consistency

Between Stonegate Drive and Roanoke Boulevard, 120th Street is inconsistent in roadway section and number of lanes, which would increase traffic delays by limiting the free-flow of traffic. This inconsistency is apparent on the aerial photo of the street, shown above in **Figure 2**. The segment of the roadway from Stonegate Drive to West Maple Road (hereafter referred to as the South segment) begins as a five-lane roadway, then narrows to a four-lane undivided roadway, then widens to a four-lane divided roadway approaching West Maple Road (see **Figure 3**). The South segment includes curb and gutter and sidewalks. Continuing north, the segment from West Maple Road to Fort Street (hereafter referred to as the North segment) begins as three-lane roadway with right turn-lane, then becomes a two-lane roadway with no curb and gutter and sidewalks. South of Roanoke Boulevard the roadway widens to a three-lane then five-lane roadway. From Roanoke Boulevard to Fort Street the roadway transitions to a recently completed four-lane divided roadway with curb and gutter and sidewalk. Both the North and South segments of 120th Street share a need for continuity of roadway width, to accommodate free-flow of traffic both now and in the future. In general, a consistent roadway section conforms with driver expectation and enhances the safety aspect of the corridor by minimizing lane changes.

With the intersection improvements which have already been completed at 120th and Fort Streets and 120th and West Maple Road, existing conditions between Stonegate Drive and Roanoke Boulevard (a two-lane roadway) are not compatible for free flowing traffic and the capacity to accommodate increasing traffic volumes. Both the North and South segments would benefit from a more consistent roadway section, removing transitions that force traffic to consolidate and hamper traffic flow. Individual needs of each segment, in addition to the shared need for continuity, are discussed below.

North of West Maple Road

Insufficient Vehicle Capacity

The 120th Street corridor between West Maple Road and Fort Street has insufficient capacity for both current and future anticipated traffic volumes. Existing and forecasted traffic volumes within the Study Area are summarized in **Table II.1**. The volume of traffic along 120th Street between the West Maple Road and Fort Street intersections is expected to grow by more than 50 percent between 2013 and 2040 (MAPA 2016b).

Table II.1. Forecasted Traffic Growth along 120th Street

	Existing (2013) Traffic Volume (VPD)	Forecasted (2040) Traffic Volume (VPD)
120 th Street north of W. Maple Road	13,300	20,600
120 th Street south of W. Maple Road	22,800	26,300
W. Maple Road west of 120 th Street	39,500	50,600
W. Maple Road east of 120 th Street	40,700	53,700

VPD –Vehicles per day.

Source: MAPA, December 2016 projections (2040), City of Omaha counts (2013). These roadway sections represent the worst-case traffic volume along the corridor.

If no improvements are implemented and capacity is not expanded, the North segment is expected to experience increased congestion and delay for drivers through and beyond the year 2040.

Inadequate Pedestrian Facilities

Pedestrian use of the corridor is limited on the North segment between West Maple Road and Fort Street, since sidewalks have not been developed adjacent to the two-lane roadway (see **Figure 3**). Pedestrian connectivity between the two main intersections of Fort Street and West Maple Road would be desired as the transportation corridor develops, along with planned urban expansion in the area (MAPA, 2015a). For adequate pedestrian connectivity between these main intersections along this minor arterial, sidewalks would be needed to comply with Omaha design standards (sidewalks on both sides of the street) in the urban environment. Currently, sidewalks are present for pedestrian use along both sides of 120th Street on the South segment of the project.

South of West Maple Road

Incompatibility with Stonegate Drive Intersection

The existing conditions from Stonegate Drive north to West Maple Road are not compatible with existing conditions outside of the Study Area from Stonegate Drive south. The roadway typical of 120th Street south of Stonegate Drive consists of five lanes (four through lanes and a center two way left turn lane) with sidewalks, curb, and gutter (**Figure 2, Figure 3**). North of Stonegate Drive, the roadway tapers to four lanes with the elimination of the center turn lane, to accommodate the width of the narrower existing bridge. The narrower bridge limits the ability to provide a five-lane roadway to match that to the south. Driver expectancy is compromised by this change in condition. The roadway expands again north of the bridge, near Mulhall's Nursery, approximately 470 feet south of the south edge of West Maple Road.

Limited Sight Distance

A limited sight-distance condition exists at the intersection of the southernmost access drive of Mulhall's Nursery, located near the 120th Street and Emmet Street intersection. The limited sight distance is caused by the existing terrain directly south of the drive and the existing bridge barrier located approximately 250 feet south of the drive, which obstruct the view of the roadway for exiting traffic. Although no crashes have been reported at this commercial driveway within the

three-year crash reporting period, this condition presents a potential hazard that could worsen as traffic volumes increase.

D. Conformance with Regulations, Land Use Plans, and Other Plans

The Project is in conformance with the State Transportation Improvement Program (STIP), and local and regional land use plans. The Project is included in the City of Omaha's Capital Improvement Program (CIP) for Fiscal Year 2017-2022 (City of Omaha, 2016). This program is a six-year schedule of capital improvement projects.

The Omaha/Council Bluffs MAPA is a voluntary association of local governments in the greater Omaha region that performs planning and development work. MAPA serves as the federally-required MPO. MPOs are required to create and maintain a fiscally-constrained Transportation Improvement Program (TIP) that lists all federally-funded and regionally significant transportation projects programmed for at least the next four fiscal years. The project was added to the MAPA TIP in April 2010. The Project is included in the TIP for Fiscal Years 2017-2022 (MAPA, 2016c).

The Project is listed in the MAPA 2040 Long Range Transportation Plan. The TIP developed by MAPA in June 2016 and modified by Amendment One Published in October, 2016 identifies this project (NE-22277) for construction in 2021 with a total project cost of \$12,540,000, of which 80 percent would be federal funding. The MAPA TIP is included in the STIP for Fiscal Year 2017-2020. The STIP is NDOR's four-year highway improvement program. Projects in the TIP/STIP that are funded using federal dollars must conform to any and all federal, state or local regulations/statutes that are applicable based on the type of project, type of funding received, scope of work and/or impact to the natural or human environments.

III. ALTERNATIVES

NEPA requires that reasonable alternatives, including the No Build (or No Action) Alternative, be presented and evaluated. This chapter describes the methods for identifying alternatives, the alternatives that were considered but eliminated from further study, and the alternatives carried forward in the document.

Several potential alternatives were considered for the Project: the No Build Alternative, the Shift East Alternative, the Centerline Alternative, and the Shift West Alternative. Additionally, a range of alternatives were considered for the vertical profile across Big Papillion Creek. An alternatives analysis was conducted to compare the alternatives based on ROW impacts, impacts to land use and local recreational areas, flood potential, and cost.

Of the alternatives evaluated, only the No Build Alternative and the Shift West Alternative were determined to be reasonable. The Shift East and Centerline Alternatives were eliminated from further study due to substantial impacts to recreational properties (Keystone Little League baseball fields and The Knolls Golf Course) and impacts to a tributary to Big Papillion Creek that would require a large drainage structure replacement and channel relocation.

Impacts to Section 4(f) of the Transportation Act resources were one of the major factors in determining the alternatives to be carried forward in this Draft EA. Section 4(f) resources are discussed in detail in Section IV. F, Section 4(f) of the Transportation Act. These resources are unique lands utilized for recreational opportunities and add to the aesthetics of the area. Therefore, this project placed a high importance on minimizing impacts to Section 4(f) resources. Alternatives considered but not carried forward due to impacts to Section 4(f) resources included shifting the 120th Street alignment east and the Centerline Alternative.

In-depth analysis of the vertical alignment of the Big Papillion Creek crossing included a hydraulic study of the area (PBS&J, 2010). The analysis considered a range of different profiles to achieve a no-rise condition (described in detail in **Section IV.K**, Drainage and Floodplain Considerations) including: lengthened bridge spans, floodplain relief structures, overtopping 120th Street scenarios, and Big Papillion Creek channel benching to improve the hydraulics. The only alternative that would meet the no-rise condition included construction of a 290-foot long bridge and channel benching in Big Papillion Creek.

Table III.2 at the end of this section summarizes the differences among the alternatives as compared to the Shift West Alternative (the Preferred Alternative), and the following section describes why the No Build, Shift East, and Centerline Alternatives were either dismissed from further consideration or were considered but would not meet the Project purpose and need.

A. Alternatives Considered, but Eliminated from Further Consideration

Alternatives not adjacent to 120th Street were eliminated from study because this Project is designed to improve traffic flow and safety within the 120th Street corridor. In addition, shifting the ROW more than 40 feet to the west or east would require acquisition of large amounts of land and a re-design of the road, resulting in the potential for greater environmental impacts and substantial costs. Therefore, alternatives not adjacent to 120th Street were not evaluated further.

The pre-screening process considered three build alternatives that included the same facility design components and differed only with respect to their horizontal alignment relative to the existing 120th Street centerline. The design components included in all three alternatives are

outlined below in **Section III.B, Shift West Alternative (Preferred Alternative)**. Specific reasons why the Shift East Alternative and Centerline Alternative were not advanced for further analysis in the DEA are summarized below.

Shift East Alternative

A design to shift 120th Street 20 feet to the east of the existing alignment was considered as an alternative means to meet the projected increase in traffic flow and to incorporate desired safety and pedestrian access features. Similar to all of the build alternatives considered, the Shift East Alternative would meet the purpose of the project to improve the consistency of the roadway section, provide continuity of pedestrian facilities, increase roadway capacity and enhance safety to accommodate projected future traffic demands. A full description of the design elements that address the need for the project is included in **Section III. B, Shift West Alternative**. The Shift East Alternative was removed from further consideration because of impacts to The Knolls Golf Course, Keystone Little League baseball fields, and a tributary to Big Papillion Creek.

The Shift East Alternative would require acquisition of 2 acres (approximately 0.8 percent of the 250-acre golf course) of ROW from the Knolls Golf Course, a Section 4(f) resource, and would place a portion of one of the golf greens within 10 feet of the ROW. As a result, this alternative would require the 0.4-acre golf green to be shifted 50 feet from its current location and also would require the relocation of the 3-acre fairway. This would disrupt play in the short term by eliminating play on this fairway during construction. It would result in a costly long-term modification to The Knolls Golf Course property to realign and reconstruct the fairway. It is likely that the golf course would have to acquire additional property in order to modify the fairway, since there is no alternative fairway location available within the existing property. The Shift East Alternative would also require the removal of at least one baseball playing field on the Keystone Little League property, which currently provides 11 baseball fields of varying sizes. All build alternatives would use Tranquility Park; any use of Tranquility Park would affect the parking lot, which is a less sensitive feature and use than any use of The Knolls Golf Course. In addition the City of Omaha Parks and Recreation Department has been planning to modify the Tranquility Park parking lot in accordance with their Redevelopment Plan. The Shift East Alternative would more severely impact the features, attributes, and activities of The Knolls Golf Course than would any other build alternative.

The Shift East Alternative would also require realignment of a tributary to Big Papillion Creek. The tributary enters Big Papillion Creek from the north, immediately east of the intersection of Big Papillion Creek and 120th Street. Under this alternative, the channel of the tributary would have to be relocated and a large drainage structure would have to be replaced.

The Shift East Alternative was not brought forward for further analysis for the following reasons:

- It would not avoid or minimize impacts to the natural and human environment; and
- It would not avoid or minimize harm to Section 4(f) resources.

Centerline Alternative

A design of 120th Street widened proportionately along the current centerline was also considered. Similar to all of the build alternatives considered, the Centerline Alternative would meet the purpose of the project to improve the consistency of the roadway section, provide continuity of pedestrian facilities, increase roadway capacity and enhance safety to accommodate projected future traffic demands. A full description of the design elements that address the need for the project is included in **Section III.B, Shift West Alternative**. The Centerline Alternative was

removed from further consideration because it would not result in the least overall harm to Section 4(f) resources due to impacts to The Knolls Golf Course. In comparison to the Shift West Alternative, the Centerline Alternative would result in a greater use of The Knolls Golf Course (a Section 4(f) resource). The incursion into the golf course property would likely require the relocation of the 3-acre fairway along 120th Street (approximately 1.2 percent of the 250-acre golf course). This would disrupt play in the short term by eliminating play at this fairway during construction. It would result in a costly modification to The Knolls Golf Course property, since the fairway would have to be reconstructed. It is likely that the golf course would have to acquire additional property in order to modify the fairway, since there is no alternative fairway location available within the existing property. All build alternatives would use Tranquility Park; any use of Tranquility Park would affect the parking lot, which is a less sensitive feature and use than any use of The Knolls Golf Course. In addition, the City of Omaha Parks and Recreation Department has been planning to modify the parking lot in accordance with their Redevelopment Plan. The Centerline Alternative would more severely impact the features, attributes, and activities of The Knolls Golf Course than would the Shift West Alternative. The Centerline Alternative was not brought forward for further analysis for the following reasons:

- It would not avoid or minimize impacts to the natural and human environment; and
- It would not result in the least overall harm to Section 4(f) resources.

B. Alternatives Carried Forward for Detailed Evaluation

The alternatives carried forward for detailed evaluation in this document include the No Build Alternative and the Shift West Alternative, which is the Preferred Alternative. This build alternative was carried forward for further evaluation because it met the purpose and need for the Project, and would have fewer impacts than other build alternatives.

No Build Alternative

The No Build Alternative would leave 120th Street in its current condition. Beginning at Stonegate Drive, 120th Street has four through lanes with a southbound left turn lane. Continuing north, 120th Street widens to five lanes (four through lanes with a center two way left turn lane) approximately 300 feet south of Emmet Street. From Emmet Street to West Maple Road, the road transitions to four through lanes with a raised median. Northbound left turn lanes are introduced at the intersection of West Maple Road. North of West Maple Road to Roanoke Boulevard, 120th Street is a two-lane road with open ditch drainage and no sidewalks.

Under the No Build Alternative, the inconsistency between roadway sections in the Study Area would continue and would not be compatible with free flow of traffic. Continuing the existing roadway configuration would not address the anticipated increase in traffic flow, which would result in insufficient vehicle capacity on 120th Street. The No Build Alternative would not meet the need for improved vehicle capacity north of West Maple Road.

Currently, there are sidewalks on both the east and west side of 120th Street from Stonegate Drive to West Maple Road. There are no sidewalks along 120th Street north of West Maple Road. Under the No Build Alternative, no sidewalks would be added and pedestrian access and use would continue to be compromised. The No Build Alternative would not meet the need to provide for continuity of pedestrian access.

The current roadway configuration from Stonegate Drive to West Maple Road is not compatible with existing roadway conditions south of Stonegate Drive, and creates an issue of limited sight

distance at one commercial access drive due to proximity of bridge barrier rail at West Maple Creek. The No Build Alternative would not meet the need to address these roadway issues.

Shift West Alternative (Preferred Alternative)

The Shift West Alternative is the Preferred Alternative. The Shift West Alternative includes modifications to 120th Street between the southern terminus, Stonegate Drive, and the northern terminus, which is Fort Street. **Figures 4A-4C** depict the project location and design in plan view. **Figures 5A and 5B** depict the typical road cross-sections for the respective segments of the Project.

The Shift West Alternative includes re-design and expansion of the existing 120th Street from Stonegate Drive to Roanoke Boulevard along a centerline approximately 20 feet west of its current alignment. This alternative would address the need for vehicle capacity and safety as well as provide increased accessibility for pedestrians, while minimizing impacts to private and commercial property, streams, and recreation. The Shift West Alternative includes the following specific actions:

South of West Maple Road

- Stonegate Drive to the bridge at the West Maple Creek/Ditch
 - Upgrade from a four-lane roadway with curb and gutter to a four-lane roadway with a center two-way-left-turn-lane.
 - Maintain the existing sidewalks on the east and west sides of 120th Street.
 - Widen the bridge across West Maple Creek to maintain a five-lane roadway.
 - Replace sidewalks on the east and west side of the widened bridge across West Maple Creek/Ditch.
- West Maple Creek/Ditch to West Maple Road
 - Add a raised median from approximately 300 feet north of West Maple Creek northward to the West Maple Road intersection (prohibiting left turns).
 - Modify the southernmost existing entry drive to the Mulhall's Nursery business to serve as the access point for this business (thereby shifting the primary access to this business approximately 300 feet south of its current location). Permanently close the two northerly existing entry drives to Mulhall's.
 - Allow for U-turns at the intersection of West Maple Road and 120th Street.

North of West Maple Road to Big Papillion Creek Bridge

- West Maple Road Intersection
 - Create four through lanes with dual left turn lanes.

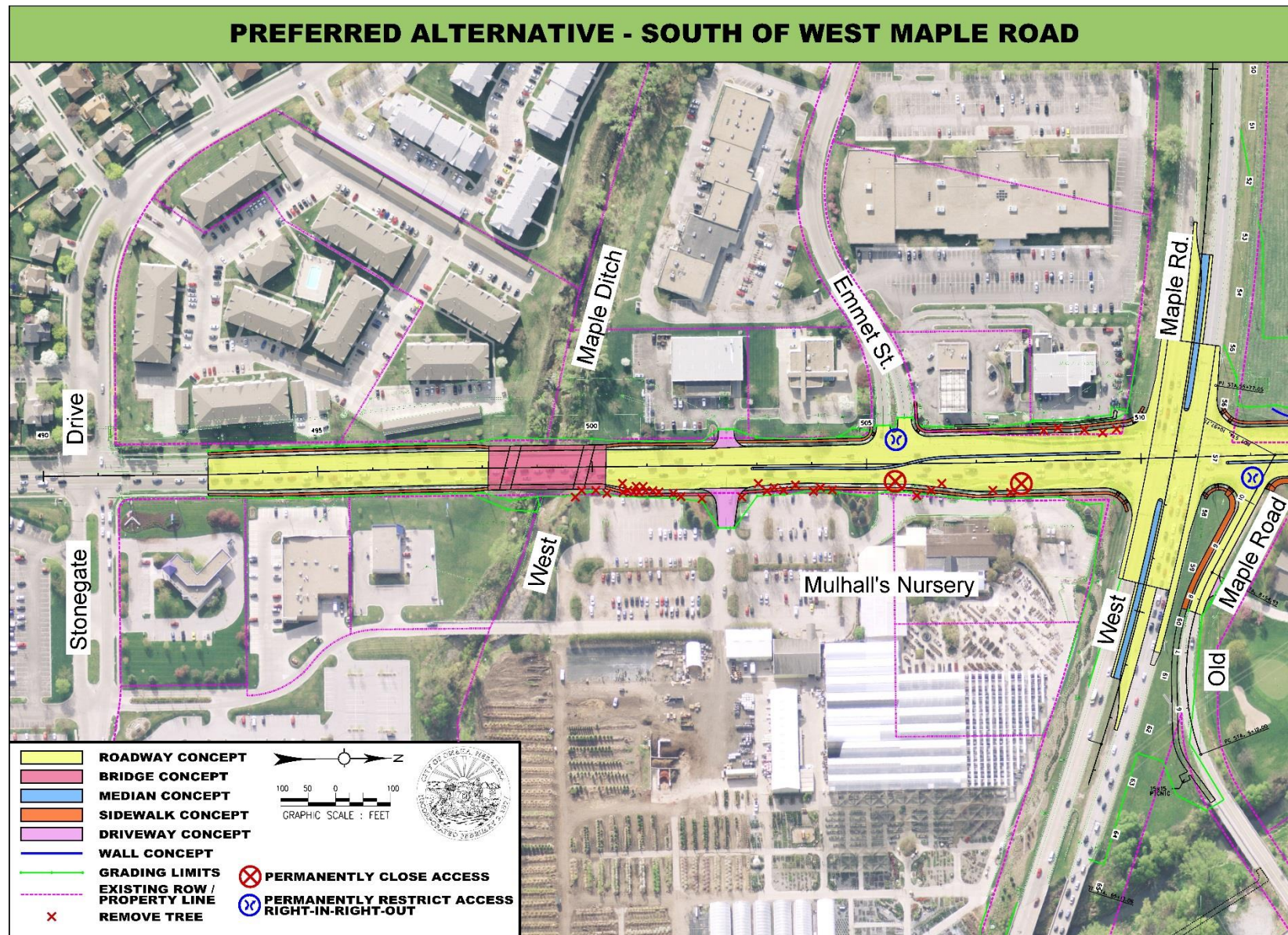


Figure 4A. Preferred Alternative – South of West Maple Road

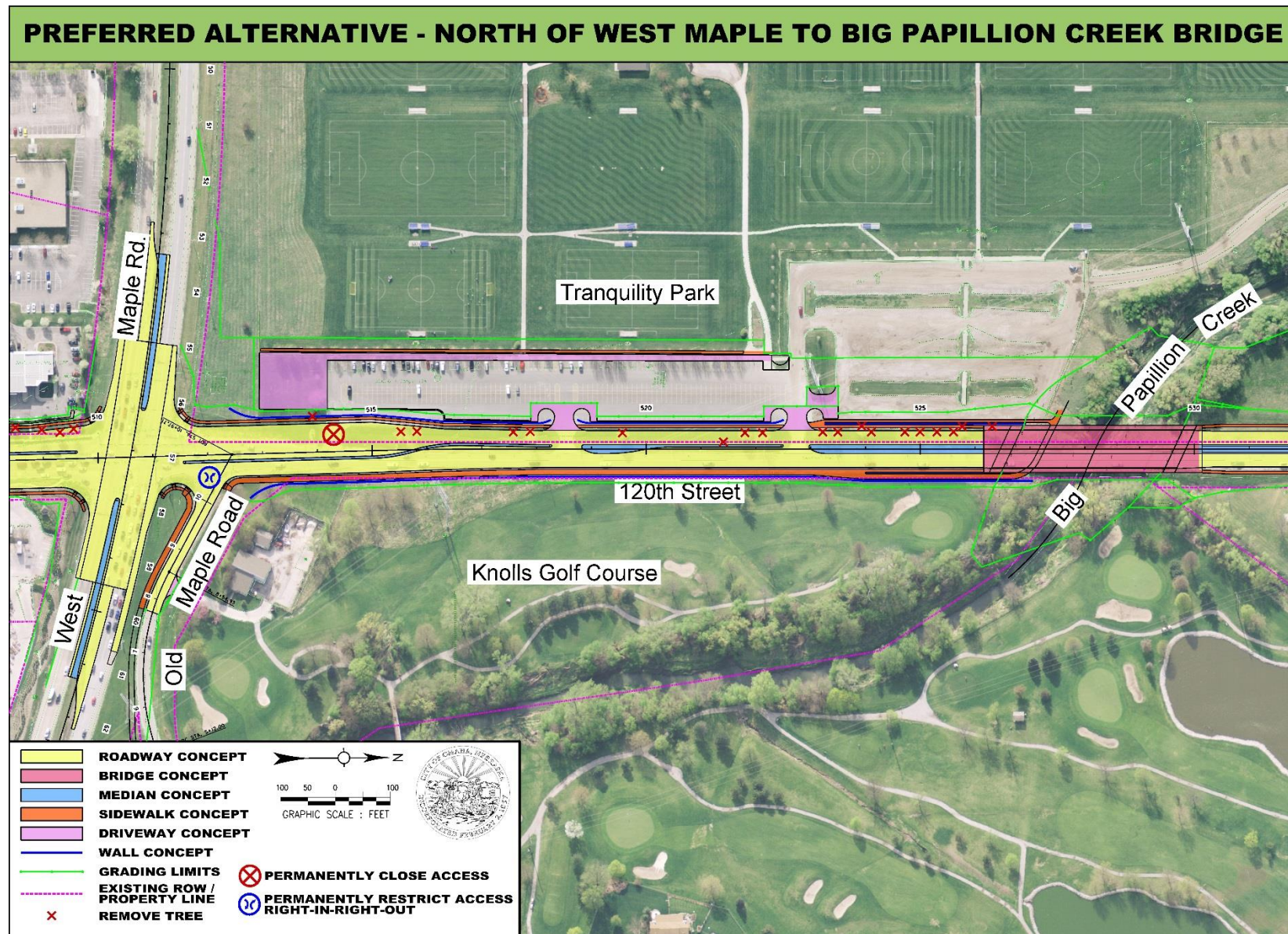


Figure 4B. Preferred Alternative – North of West Maple to Big Papillion Creek Bridge

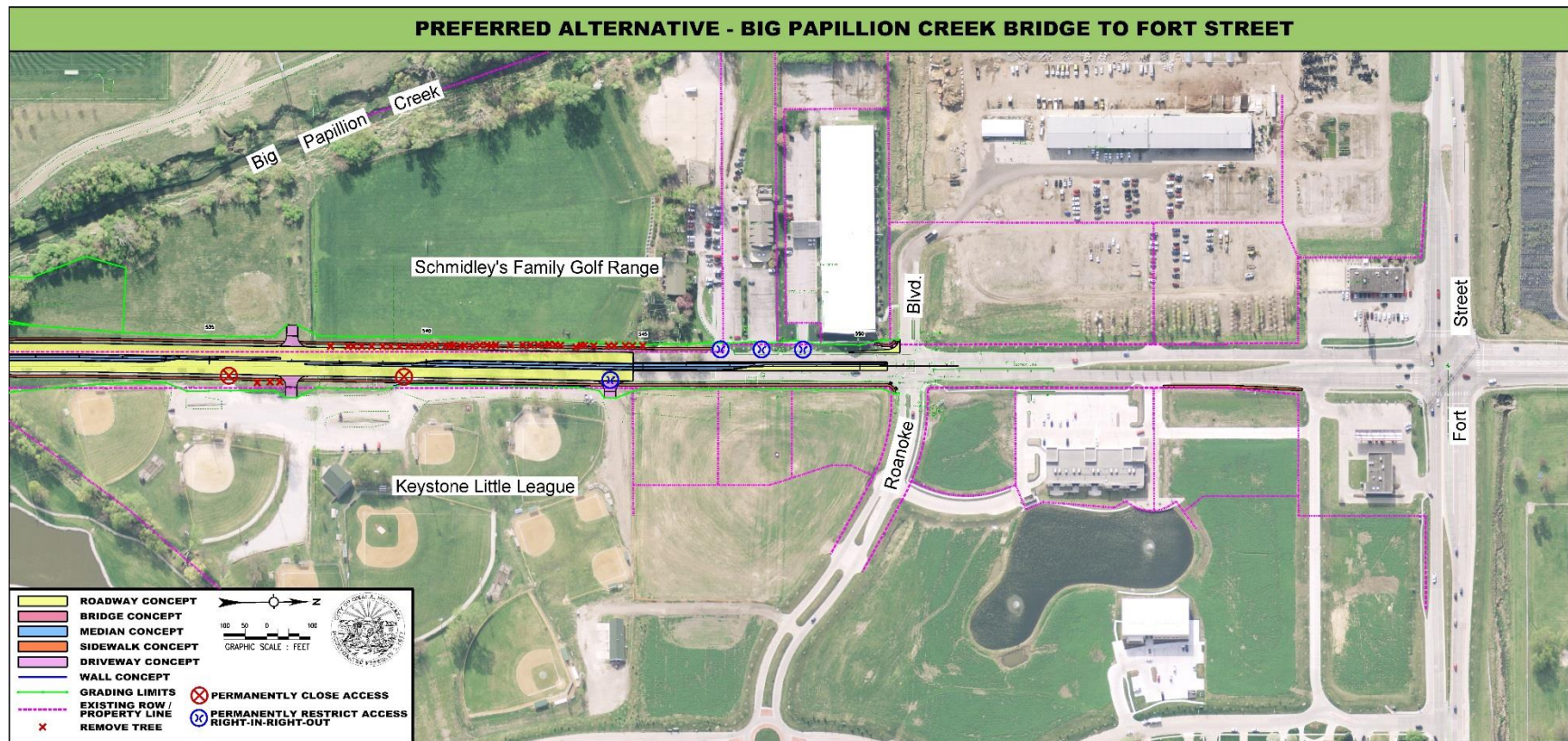


Figure 4C. Preferred Alternative – Big Papillion Creek Bridge to Fort Street

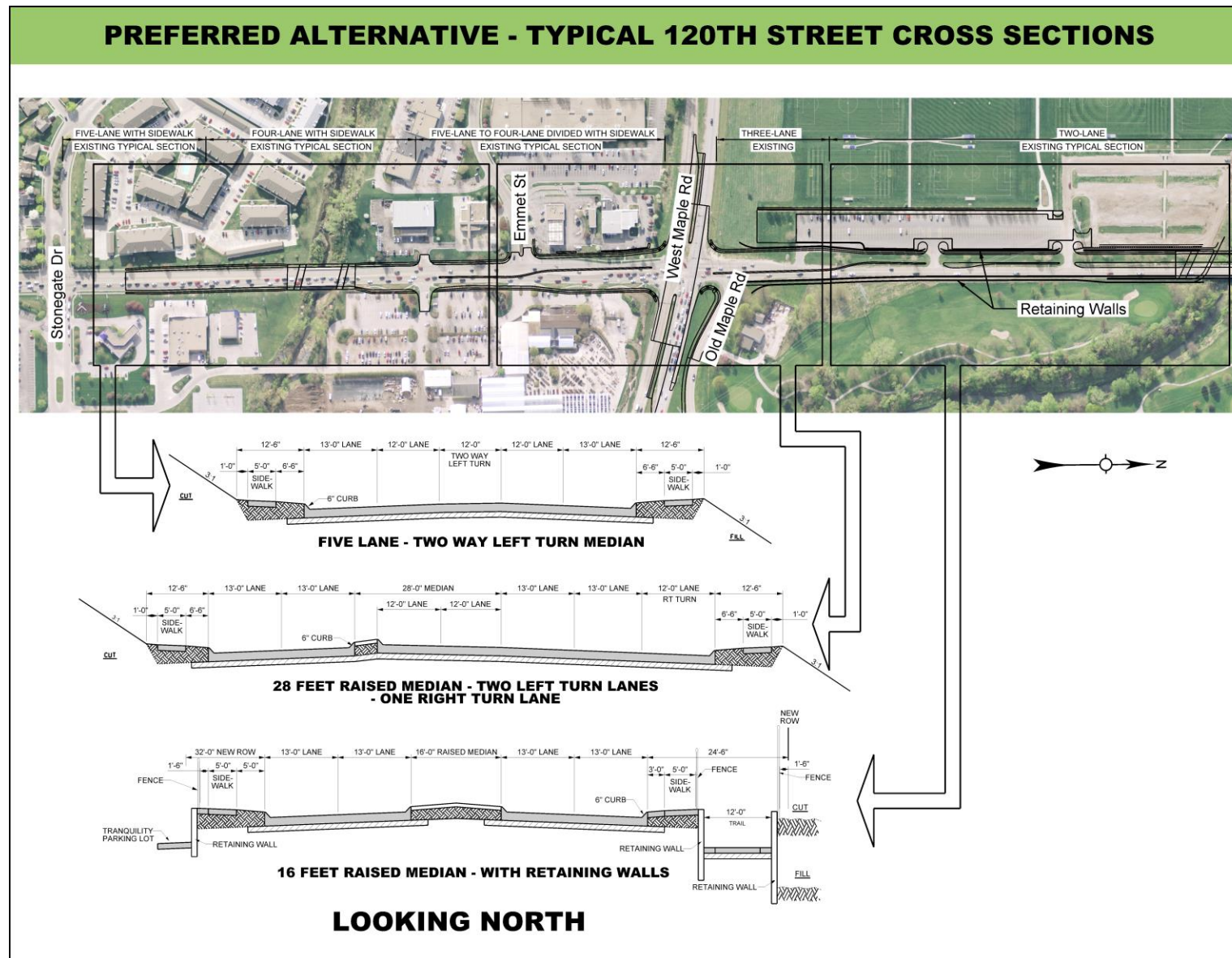


Figure 5A. Preferred Alternative – Typical 120th Street Cross Sections

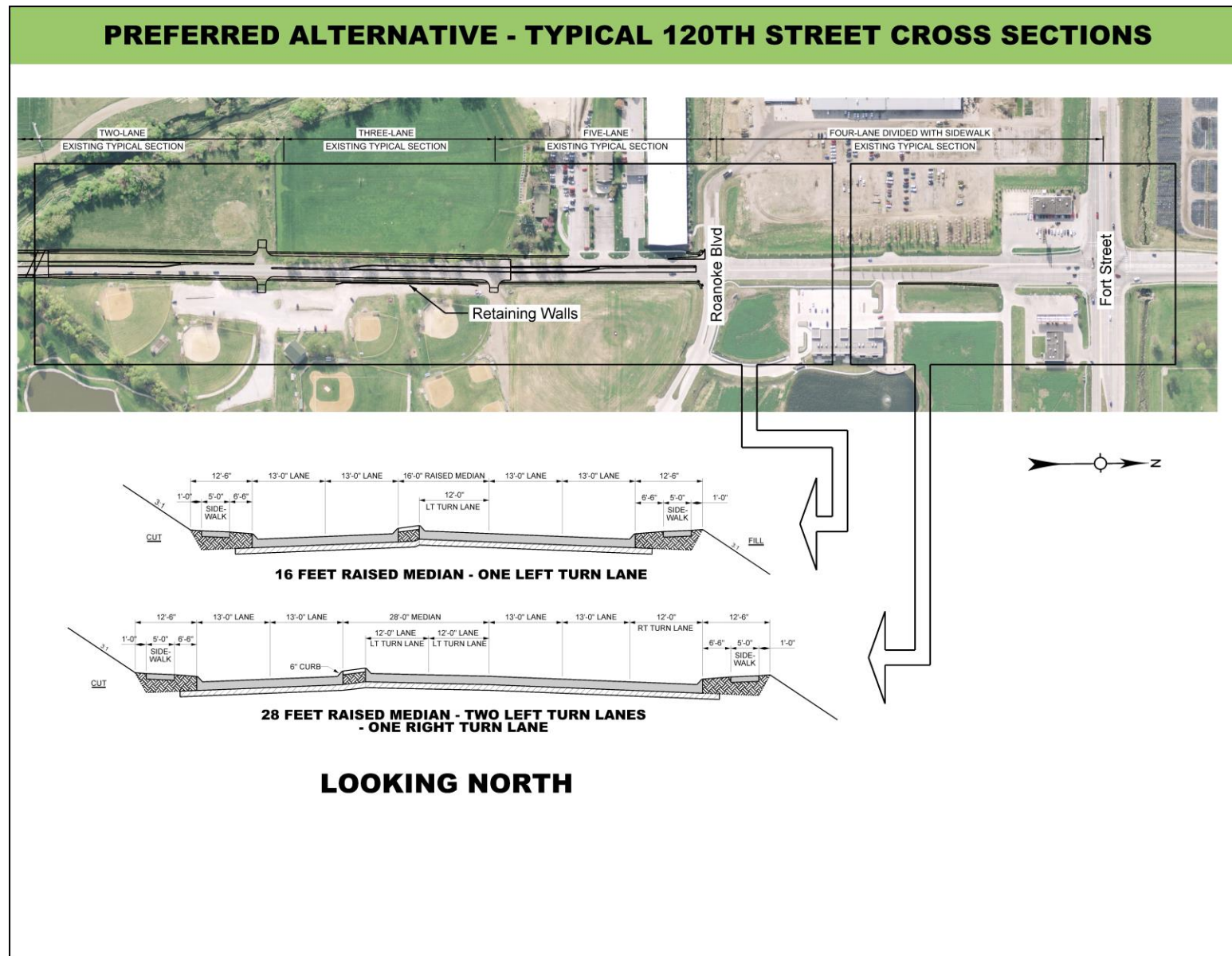


Figure 5B. Preferred Alternative – Typical 120th Street Cross Sections

West Maple Road to Big Papillion Creek Bridge:

- Upgrade to a four-lane roadway with a 16-foot raised median.
- Install curb and gutter and a new storm sewer system.
- Add sidewalks on both the east and west sides of 120th Street.
- Prevent left turns to/from Old Maple Road by construction of a median on 120th Street.
- Remove the southernmost access to the parking lot for Tranquility Park.
- Construct a 10-foot wide pedestrian trail along the east side of 120th Street from West Maple Road to Big Papillion Creek, where the trail would pass under the Big Papillion Creek Bridge and continue west, tying into the parking lot of Tranquility Park.
- Create one right-turn-in, right-turn-out access Old Maple Road located 140 feet north of the north edge (westbound lane outside edge) of West Maple Road and two dual in-out accesses for Tranquility Park. The accesses to Tranquility Park on 120th Street are 745 feet and 1200 feet north of the north edge (westbound lane outside edge) of West Maple Road.

Big Papillion Creek Bridge:

- Replace the existing bridge with a new, 290-foot-long bridge.
- Create sidewalks on the east and west sides of 120th Street.
- Create a trail to pass under the bridge from the east to the west.

North of Big Papillion Creek to Fort Street:

- Continue a four-lane roadway with a 16-foot raised median.
- Add sidewalks on both the east and west sides of 120th Street.
- Create left turn lanes at Roanoke Boulevard.
- Close the southernmost existing access location to the Keystone Little League parking lot and modify an existing main access somewhat further south to serve as the primary access.
- Prevent left turns for southbound traffic on 120th Street into the commercial properties south of Roanoke Boulevard.
- Allow for a U-turn at Roanoke Boulevard for northbound traffic.

The improvements listed above are necessary for safety and flow of traffic along this segment of 120th Street. Improvements south of West Maple Road would provide roadway typical section conformity to the existing road conditions south of Stonegate Drive and provide through-lane consistency for the proposed four-lane roadway north of West Maple Road. The road improvements for the Project are being designed to avoid major relocation of businesses or business's access. All of the proposed modifications in the Project are consistent with the City of Omaha Planning Department's Master Plan for arterial roadways. West Maple Road improvements considered under this project would be utilized by the expansion plan for West Maple Road shown in the 2040 LRTP. The Shift West Alternative would meet the needs of the Project with the improvements as detailed below.

South of West Maple Road

Incompatibility with Stonegate Drive:

120th Street from Stonegate Drive to West Maple Creek would be modified from a four-lane undivided roadway to a five-lane roadway with a center two-way left-turn lane. This change would conform to the existing roadway configuration on 120th Street south of Stonegate and thereby improve traffic flow.

Limited Sight Distance:

The existing sight distance issue at the driveway to Mulhall's Nursery would be significantly improved through widening the West Maple Creek bridge, adding a right turn lane, providing a wider urban shoulder with sidewalk, and removing the existing landscaping that encroaches on the sight triangle. The sight distance along 120th Street would be increased from approximately 200 feet to 400 feet.

North of West Maple Road

Insufficient Vehicle Capacity:

The Shift West Alternative would modify the road from a two lane road to a four lane road with raised median. The addition of the two additional lanes would increase capacity. Based on existing traffic counts and growth rates provided by MAPA, the expected 2040 traffic volume for the segment of 120th Street north of West Maple Road is 20,600 vehicles per day. The capacity of a two-lane roadway is 17,076 vehicles per day (per MAPA). Because a two-lane roadway would provide insufficient capacity for the projected 2040 traffic volume, a four-lane roadway for this segment would be warranted.

Inadequate Pedestrian Access:

Inadequate pedestrian access would be addressed under the Shift West Alternative by adding sidewalks on both sides of 120th Street north of West Maple Road. This design element would address the need to provide continuity of pedestrian facilities along 120th Street.

The permanent limits of construction (LOC) for the Project cover 19.8 acres, including the existing ROW, extending the length of 120th Street from approximately Stonegate Drive on the south to Roanoke Boulevard on the north (**Figure 6**). The permanent LOC also extend approximately 950 feet east and west along West Maple Road at the intersection of 120th Street and include the portion of Old Maple Road that would receive improvements. At the bridge over Big Papillion Creek, the permanent LOC include the areas that would be re-graded and vegetated. The permanent LOC are approximately 84 feet wide at their narrowest point near Stonegate Drive and 117 feet wide at their widest point near the intersection with West Maple Road.

The temporary LOC, which include the area that would be disturbed by storage and transportation of construction equipment and likely would not be subject to long term impacts, include an additional disturbance area of 9.2 acres (**Figure 6**). These additional areas occur along Big Papillion Creek near the areas to be graded, along the west side of 120th Street within the Tranquility Park parking lot, on the east side of 120th Street within The Knolls Golf Course, east of the permanent LOC along West Maple Road, and in smaller areas near West Maple Creek.



April 2017



Legend

- Preferred Alternative Center
- Streets
- Streams
- Study Area

Preferred Alternative Limits of Construction

- Permanent
- Temporary

Preferred Alternative

120th Street Draft EA
 Omaha, Nebraska

Figure 6. Preferred Alternative Limits of Construction

C. Preferred Alternative

The Preferred Alternative is the Shift West Alternative and includes modifications to 120th Street between the southern terminus, Stonegate Drive, and the northern terminus, which is Fort Street. For descriptive purposes the Project is divided into four sections: the urban section of roadway south of West Maple Road; the rural section of roadway north of West Maple Road; the Big Papillion Creek bridge; and the rural roadway north of Big Papillion Creek. Additional discussion of the design elements of the Preferred Alternative is provided below.

South of West Maple Road to Stonegate Drive

The Project would begin approximately 200 feet north of Stonegate Drive. The road would be paved with concrete. The existing four-lane, urban curb-and-gutter roadway through the bridge over West Maple Creek/Ditch would be improved to a four-lane urban section (with curb and gutter) with a 12-foot, two-way, left-turn lane median. New storm sewers would be installed to collect and carry storm water runoff. The existing bridge over West Maple Creek/Ditch would be widened to accommodate the 62-foot-wide five-lane roadway. A 7-foot-clear sidewalk would be provided on each side of the bridge. New concrete barrier rail and sloped end treatments would be installed according to urban design standards. The existing bridge deck would be milled and overlaid with silica fume concrete.

Approximately 300 feet north of the bridge over West Maple Creek/Ditch, the roadway would transition to an 80-foot wide four-lane divided roadway with dual left-turn lanes for the north and south approaches through the West Maple Road corridor. The median opening at Emmet Street would be removed. This would convert Emmet Street to a right-in-right-out access and close the two northerly accesses to Mulhall's Nursery on the east side of the roadway. A new primary access to Mulhall's would be provided 300 feet to the south, where an existing secondary access to Mulhall's already exists. Removing the left turn at Emmet Street into Mulhall's would improve the safety and function of 120th Street for southbound traffic, given the proximity of this intersection to West Maple Road. Due to the restricted movements at Emmet Street, a permitted U-turn movement would be allowed for northbound traffic on 120th Street at West Maple Road. This would provide access to the properties along the west side of 120th Street. An additional lane is proposed from Emmet Street to West Maple Road to provide additional U-turn width and right turn storage for southbound traffic approaching Emmet Street. Sidewalks, 5 feet wide, would be provided on both sides of the roadway up to the bridge (and 7-foot clear sidewalks across the bridge) south of West Maple Road. One lane of traffic in each direction would be maintained during construction within this segment.

North of West Maple Road to the Big Papillion Creek Bridge (including the intersection with West Maple Road)

Improvements to West Maple Road would include modifications to the profile grade to provide proper design speed and comfort criteria for all four approaches to the intersection. The profile of West Maple Road would be improved to provide minimum stopping sight distance for 120th Street through the intersection. West Maple Road would have approximately 250 feet of improvements east and west of the intersection with 120th Street. The improvements would include lengthened dual left-turn lanes. One lane of traffic in each direction would be maintained during construction within this segment.

The two-lane existing rural roadway section would be upgraded to a four-lane divided urban roadway with concrete paving and curb and gutter. New storm sewers would be installed to collect

and carry storm water runoff. Approximately 300 feet north of West Maple Road, 120th Street would transition from an 80-foot wide four-lane divided roadway with dual left-turn lanes to a 68-foot wide four-lane roadway with a 16-foot raised median. The section of roadway from West Maple Road to the bridge over Big Papillion Creek would incorporate mechanically stabilized earth (MSE) retaining walls on both sides of the roadway, adjacent to the sidewalk. The walls are included to minimize the impacts to recreational properties alongside 120th Street through this area. A 10-foot wide pedestrian trail is proposed along the east side of 120th Street from West Maple Road to Big Papillion Creek, where the trail would pass under the Big Papillion Creek Bridge and continue west. The proposed trail along 120th Street is part of the City of Omaha Parks and Recreation trail system. The Preferred Alternative would accommodate the proposed trail within the permanent limits of construction of the project. A node and picnic bench are proposed at the West Maple Road trail terminus. Access management through this stretch includes reducing Old Maple Road access to a right-in-right-out and eliminating the south access for Tranquility Park. Two access locations would be maintained for Tranquility Park at a safe distance from the 120th Street and West Maple Road intersection. The existing 28-foot wide bridge over Big Papillion Creek would be removed and replaced with a longer and wider closed concrete barrier rail bridge (86 feet wide) to accommodate the widened roadway cross-section. Guardrail would be installed on the bridge barrier. A 7-foot wide clear sidewalk would be provided on each side of the new bridge.

The longer bridge length is necessary to accommodate hydraulic requirements of Big Papillion Creek. Channel improvements would be accomplished by excavating and benching the existing channel above the ordinary high water level, upstream and downstream of the bridge. The proposed bridge would include soil stabilization techniques to protect existing Big Papillion Creek channel, proposed bridge structure, and storm sewer outlets.

Big Papillion Creek Bridge (Changes to the Vertical Alignment)

Due to the hydrology and engineering needs of the Project, the vertical alignment of the Big Papillion Creek Bridge was designed as follows.

Under the current conditions and assuming future hydrology, 120th Street south of the existing bridge would be overtopped by water from a 5-year storm event. To address this issue, an analysis was performed to determine the hydraulic event that would be appropriate for re-design of 120th Street. The analysis included a series of events ranging from the 5-year storm event to the 100-year storm event. The analysis considered the policy set by the City of Omaha and NDOR for accommodating existing floods, as well as the Federal Emergency Management Agency (FEMA) requirement for a 100-year no-rise condition. 44 CFR 60.3(d) (3) identifies the no-rise condition as “Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory Floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.” The analysis concluded that the vertical profile of the roadway should be designed to accommodate a 30-year current storm event while the bridge over the Big Papillion Creek would be designed to meet the future 100-year hydrology. A 290-foot long bridge with channel benching in Big Papillion Creek was the only vertical alignment that complied with the FEMA 100-year future no-rise condition. Because the proposed design did not comply with the City of Omaha design standard for the 50-year future flood, but rather the 30-year current event (approximately a 10-year future event), the design criterion was waived and a No-Rise Certificate (documentation of the engineering analysis) has been developed and approved for the Preferred Alternative.

North of Big Papillion Creek

120th Street north of Big Papillion Creek to approximately Roanoke Boulevard would consist of a 68-foot wide four-lane divided urban roadway with a 16-foot wide raised median. An existing five-lane urban section south of Roanoke Boulevard would be modified to include a raised median to provide consistency for the 120th Street typical section and channelization approaching Roanoke Boulevard. MSE walls would be used adjacent to the Keystone Little League property to minimize impacts to ball fields and circulating roadways.

Access would be managed to improve safety along this stretch of roadway. Currently, Keystone Little League has three access locations along the east side of 120th Street. Access locations would be reduced to two and repositioned to maintain circulatory needs within parking areas. The existing access locations for properties on the west side of 120th Street would be maintained in their current locations, but would be restricted to right-in-right-out movements due to the proximity to Roanoke Boulevard. To accommodate northbound traffic accessing the businesses on the west side of 120th Street, the southwest return of Roanoke Boulevard and 120th Street would be modified to allow U-turn movements. Through traffic would be directed off-site during construction of the segment north of West Maple Road to just south of Roanoke Boulevard, with alternate routes via 132nd Street and/or 108th Street. One lane of local traffic would be maintained during construction to provide access to drives of adjacent properties along 120th Street.

As a result of improved traffic capacity, vertical profile improvements, and access management, the 120th Street corridor would see improved flow of traffic compared to the No Build Alternative. Additionally, sidewalks would provide continuous access for pedestrians throughout the entire linear extent of the project.

Table III.2. Alternatives Summary Table

ALTERNATIVES		No Build Alternative	Shift West Alternative (Preferred)	Centerline Alternative	Shift East Alternative
Traffic flow		Anticipated increase in traffic volume would reduce traffic flow.	Traffic flow would be improved	Traffic flow would be improved	Traffic flow would be improved
Connectivity or compatibility		Anticipated increase in traffic volume would increase delay and diminish connectivity.	Additional lanes, roadway profile safety upgrades, and continuous sidewalks would improve connectivity.	Additional lanes, roadway profile safety upgrades, and continuous sidewalks would improve connectivity.	Additional lanes, roadway profile safety upgrades, and continuous sidewalks would improve connectivity.
Avoid or minimize impacts to the natural environment	Waters of the US	Avoids impacts.	0.220 acres (avoids Big Papillion Creek tributary east of 120 th Street) Impacts to <ul style="list-style-type: none">• Big Papillion Creek• West Maple Creek/Ditch Source of Impact <ul style="list-style-type: none">• Bridge Construction• Storm Sewer Outlets• Contractor Crossings (temporary)	0.225 acres (0.005 acres along tributary) Impacts to <ul style="list-style-type: none">• Big Papillion Creek• West Maple Creek/Ditch• Tributary to Big Papillion Creek east of 120th Street near The Knolls Golf Course Source of Impact <ul style="list-style-type: none">• Bridge Construction• Storm Sewer Outlets• Contractor Crossings (temporary)	0.230 acres (0.01 acres along tributary) Impacts to <ul style="list-style-type: none">• Big Papillion Creek• West Maple Creek/Ditch• Tributary to Big Papillion Creek east of 120th Street near The Knolls Golf Course Source of Impact <ul style="list-style-type: none">• Bridge Construction• Storm Sewer Outlets• Contractor Crossings (temporary)
	Wetlands	Avoids impacts.	0.200 acres (avoids Big Papillion Creek tributary east of 120 th Street)	0.205 acres (0.005 acres fringe wetland along tributary)	0.210 acres (0.01 acres fringe wetland along tributary)

ALTERNATIVES					
		No Build Alternative	Shift West Alternative (Preferred)	Centerline Alternative	Shift East Alternative
Avoid or minimize impacts to the human environment	Pedestrian access and use	Area lacks consistent and sufficient sidewalks and crosswalks for acceptable connectivity.	Continuous sidewalks and designated street crossings would provide enhanced accessibility.	Continuous sidewalks and designated street crossings would provide enhanced accessibility.	Continuous sidewalks and designated street crossings would provide enhanced accessibility.
	Commercial Properties South of West Maple Road	Commercial properties would likely be adversely affected by an increase in traffic congestion.	<ul style="list-style-type: none"> Modification of 120th St. access locations, as described in Section III, B Shift West Alternative (Preferred Alternative) and C, Preferred Alternative Minor right-of-way and temporary easements not affecting long-term operation 	<ul style="list-style-type: none"> Modification of 120th St. access locations would be the same as identified for the Shift West Alternative Minor right-of-way and temporary easements not affecting long-term operation 	<ul style="list-style-type: none"> Modification of 120th St. access locations would be the same as identified for the Shift West Alternative Minor right-of-way and temporary easements not affecting long term operation
	Commercial Properties North of West Maple Road	Commercial properties would likely be adversely affected by an increase in traffic congestion.	Schmidley's Family Golf Range <ul style="list-style-type: none"> Modification of 120th St. access locations, as described in Section III, B Shift West Alternative (Preferred Alternative) and C, Preferred Alternative Minor safety concern for 120th Street users from errant golf balls Keystone Little League <ul style="list-style-type: none"> Modification of 120th St. access locations, as described in Section III, B Shift West Alternative (Preferred Alternative) and C, Preferred Alternative Tennis Club & Catering Business <ul style="list-style-type: none"> Modification of 120th St. access location, as described in Section III, B Shift West Alternative (Preferred Alternative) and C, Preferred Alternative 	Schmidley's Family Golf Range <ul style="list-style-type: none"> Modification of 120th St. access locations would be the same as identified for the Shift West Alternative Minor safety concern for 120th Street users from errant golf balls Keystone Little League <ul style="list-style-type: none"> Modification of 120th St. access locations would be the same as identified for the Shift West Alternative South playing field removed Parking lot narrowed with minimal loss of stalls Tennis Club & Catering Business <ul style="list-style-type: none"> Modification of 120th St. access location would be the same as identified for the Shift West Alternative 	Schmidley's Family Golf Range <ul style="list-style-type: none"> Modification of 120th St. access locations would be the same as identified for the Shift West Alternative Minor safety concern for 120th Street users from errant golf balls Keystone Little League <ul style="list-style-type: none"> Modification of 120th St. access locations would be the same as identified for the Shift West Alternative South playing field removed 300-ft. of parking stalls removed Tennis Club & Catering Business <ul style="list-style-type: none"> Modification of 120th St. access location would be the same as identified for the Shift West Alternative

ALTERNATIVES				
	No Build Alternative	Shift West Alternative (Preferred)	Centerline Alternative	Shift East Alternative
Avoid or minimize use of Section 4(f) resources¹	There would be no use of Section 4(f) resources.	<p>The Knolls Golf Course</p> <ul style="list-style-type: none"> • Less than 1.5 percent of the 250-acre golf course would be used • 0.07 percent of 250-acre golf course would be permanently transferred into ROW • Permanent changes would not affect the layout of the three-acre fairway, nor would they impair the public's ability to play the affected hole <p>Tranquility Park</p> <ul style="list-style-type: none"> • Less than 3 percent of the 340-acre park would be impacted • Both the temporary and permanent uses of the park would occur within the existing parking lot • 0.69 percent of the 340-acre park within the parking lot would be acquired for permanent conversion to Project ROW; however, expansion was already planned for the parking • The south access to Tranquility Park would be eliminated, but two new access points would be constructed • No long-term uses of the activities, feature or attributes of the park 	<p>The Knolls Golf Course</p> <ul style="list-style-type: none"> • Would likely require the relocation of the affected approximately three-acre fairway along 120th Street, which is about 1.2 percent of the 250-acre golf course • Would disrupt play in the short term • Would be a costly modification to The Knolls Golf Course property <p>Tranquility Park</p> <ul style="list-style-type: none"> • Less acreage affected than the Preferred Alternative 	<p>The Knolls Golf Course</p> <ul style="list-style-type: none"> • Would require acquisition of two acres of ROW from the Knolls Golf Course (approximately 0.8 percent of the 250-acre golf course) and relocation of the three-acre affected fairway, which is about 1.2 percent of the 250-acre golf course. • Would place a portion of one of the golf greens within 10 feet of the ROW, thereby requiring relocation of 0.4-acre green • Relocation of the fairway/green would cause a temporary disruption for recreation at The Knolls Golf Course • Reconfiguring the fairway/green would be costly to The Knolls Golf Course property. • The proximal location to Big Papillion Creek would prevent reconfiguration of fairway/green on-site thus changing the character of the facility. <p>Tranquility Park</p> <ul style="list-style-type: none"> • Least affected acreage

ALTERNATIVES				
	No Build Alternative	Shift West Alternative (Preferred)	Centerline Alternative	Shift East Alternative
		(existing sports fields or park amenities) <ul style="list-style-type: none"> • Park users would be able to access park facilities throughout construction • Alternative coordinated and accepted by City of Omaha Parks, Recreation, & Public Property Department 		
Meets the identified Project needs	No; vehicle capacity would remain the same, vehicle safety, roadway incompatibility and pedestrian accessibility conditions would continue	Yes; vehicle capacity would increase, Project changes would address vehicle safety, roadway continuity and pedestrian access conditions	Same as Preferred Alternative	Same as Preferred Alternative
1) Section 4(f) Resources could not feasibly be avoided with a build alternative for several reasons. All of the build alternatives that could potentially meet the project purpose of improved traffic flow and public safety would involve expansion along 120 th Street on the western and/or eastern side of the street. Because the two Section 4(f) Resources are immediately adjacent to 120 th Street on either side, modifications to 120 th Street would impact one or both resources. The Preferred Alternative minimizes impacts to the activities, features, and attributes of the Section 4(f) Resources and still meets the project purpose and need for consistency of the roadway section, continuity of pedestrian facilities, roadway capacity and enhanced safety.				

D. General Project Schedule and Anticipated Funding

The Project would be funded with FHWA provided Surface Transportation Block Grant funds allocated by the NDOR local project section. The construction of the Preferred Alternative is programmed in the 2017-2022 MAPA Transportation Improvement Program (MAPA, 2017 TIP with Amendment One, 27 October 2016). The total Project cost (for preliminary and final engineering, right-of-way and construction) is estimated at \$12,540,000, of which 80 percent would be federal funding.

The construction of the Preferred Alternative, as described, would cover two construction seasons and last approximately 18 months. Construction is tentatively expected to begin spring 2021 and to be completed fall 2022.

IV. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

This Section discusses the environmental considerations for the Project in the context of the affected environment, impacts of the No Build and Preferred Alternative, proposed mitigation, standard specifications and additional provisions. Standard specifications are requirements of NDOR regarding materials, products, services and construction methods. Additional provisions are additions and revisions to the standard specifications. Issues that were eliminated from further study are also addressed.

A. Issues Eliminated from Further Study

The following potentially affected resources do not occur in the Study Area, or were determined not to be affected by the Project, and were therefore eliminated from further study.

- Air Quality Analysis – This issue was eliminated from further study because the Project is located in an Attainment Area as defined by the National Ambient Air Quality Standards. A Memorandum of Understanding dated November 2004 between FHWA, Nebraska Department of Environmental Quality (NDEQ) and NDOR applies to this Project, exempting it from evaluating air quality because the Average Annual Daily Traffic (AADT) is below 100,000 (**Appendix B, Memorandum of Understanding Air Quality Analysis for Environmental Documents**). However, Mobile Source Air Toxics (MSATs), regulated by the Environmental Protection Agency (EPA), are analyzed in Chapter IV, Section P.
- Visual Resources - This issue was eliminated from further study because the Project would entail widening an existing transportation corridor and replacing an existing bridge on a shifted alignment of the existing road. The Project would occur in an urban environment with existing visual intrusions such as buildings and roads.
- Wild and Scenic Rivers – This issue was eliminated from further study because there are no Wild and Scenic Rivers in the Project vicinity.
- Platte River Depletions – The Project is not within the Platte River drainage basin, and therefore would not deplete flows to the Platte River.
- Farmlands – No parcels specifically zoned for agricultural purposes were identified within the Study Area. However, previously undeveloped properties located northeast of the intersection of 120th Street and Roanoke Boulevard are identified as farmland by the Natural Resource Conservation Service (NRCS) Soil Survey conducted for Douglas County, Nebraska. The Farmland Protection Policy Act (FPPA) does not include projects on land already in urban development (NRCS, 2012). The properties have since been zoned as Mixed Use, Mixed Use/Floodplain, and Development Reserve properties by the City of Omaha; therefore, the FPPA development restrictions are no longer applicable.

Construction of the Preferred Alternative is expected to take approximately two years. As indicated in Section III.C, through traffic on several Project roadway segments would be maintained through use of temporary measures during the construction period. The portion of 120th Street north of West Maple Road to south of Roanoke Boulevard would be temporarily closed to through traffic; however, message boards identifying alternative routes via 132nd Street or 108th Street would be placed at West Maple Road and Fort Street one week prior to and during the period 120th Street is closed to through traffic. (North of West Maple Road, local access would be maintained to areas served by 120th Street at all times during the construction period.) Because existing traffic patterns in the Study Area would be temporarily disrupted to a degree during the

construction period, the impact assessment for the Project included consideration of possible temporary impacts along the alternate routes.

Use of 132nd Street and 108th Street, and any other north-south streets in the vicinity, as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. To the extent that the use of alternate routes during the construction period might cause any impacts, such impacts would result exclusively from a temporary increase in traffic volume on these alternate routes. Therefore, the temporary use of alternate travel routes during the construction period would not result in identifiable impacts to elements of the natural environment (e.g., land resources, drainage, wetlands, or vegetation) or to existing structures.

During the construction period some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. To determine the effect of that shift, the City of Omaha asked the Metro Area Planning Agency (MAPA) to perform a traffic model analysis that assumed 120th Street would be closed and traffic would be diverted to other arterials within the local area. The model analysis indicated that 108th Street and 132nd Street would have sufficient capacity to accommodate the temporary increase in traffic volume.

It is conceivable that temporarily increased traffic volume on the alternate routes could be noticeable to human uses along those routes. As a result, some subsequent sections of this chapter include specific discussion addressing the potential for temporary impacts associated with a temporary increase in traffic on the alternative routes.

B. Land Ownership, Jurisdiction, and Land Use

Summary

Land ownership, jurisdiction, and land use are evaluated in terms of public service versus private ownership, governmental authorities and potential for change in land use relative to the alternatives evaluated.

Affected Environment

Land Ownership

Property ownership in the Study Area includes a mix of private and public lands. Approximately 211 acres (50 percent) of the Study Area is private land and includes medium- and high-density residential and commercial properties such as retail, office buildings, and recreational facilities. The remaining 213 acres (50 percent) of the Study Area includes the City of Omaha's Tranquility Park, the 120th Street ROW, the ROWs for West Maple Road, Old Maple Road, Emmet Street, Stonegate Drive, Roanoke Boulevard, North 118th Street, and several small neighborhood roads. In the Study Area, the ROW ranges in width from 66 feet to 120 feet.

Jurisdiction

The Study Area is located within the zoning jurisdiction limits of the City of Omaha. The Study Area contains the following zoning categories as defined by the City (City of Omaha, 2012c) (**Figure 7**).

- Community Commercial District (CC), Community Commercial District-Floodway Overlay District (CC-FW) and Community Commercial District-Floodplain (CC-FF): The parcels located south of the intersection of 120th Street and West Maple Road and the parcels located south of the intersection of 120th Street and Fort Street are zoned as the Community Commercial District. This district consists of commercial facilities which serve the needs of several neighborhoods. Commercial and office uses allowed in this zone are generally compatible with nearby residential areas. However, uses allowed in this district may generate more traffic and have more effect on residential neighborhoods than those allowed in the less intense commercial district. Site development regulations are designed to minimize these effects. Most Community Commercial Districts typically require access from major streets, primarily minor and major arterials.
- Development Reserve District (DR), Development Reserve District-Floodway Overlay District (DR-FW), and Development Reserve District-Floodplain (DR-FF): Tranquility Park, the ball fields, and a portion of the driving range are located within the Development Reserve District. This district is intended to provide a transitional zone for the orderly conversion of land from agricultural and rural to urban uses. This district coincides generally with undeveloped land on the fringe of the urbanized area which has access to public facilities. However, this district may also apply to certain sites within central city development areas. It permits both agricultural and rural uses and very-low-density residential use. It assures that land is not developed prematurely or without adequate urban services.

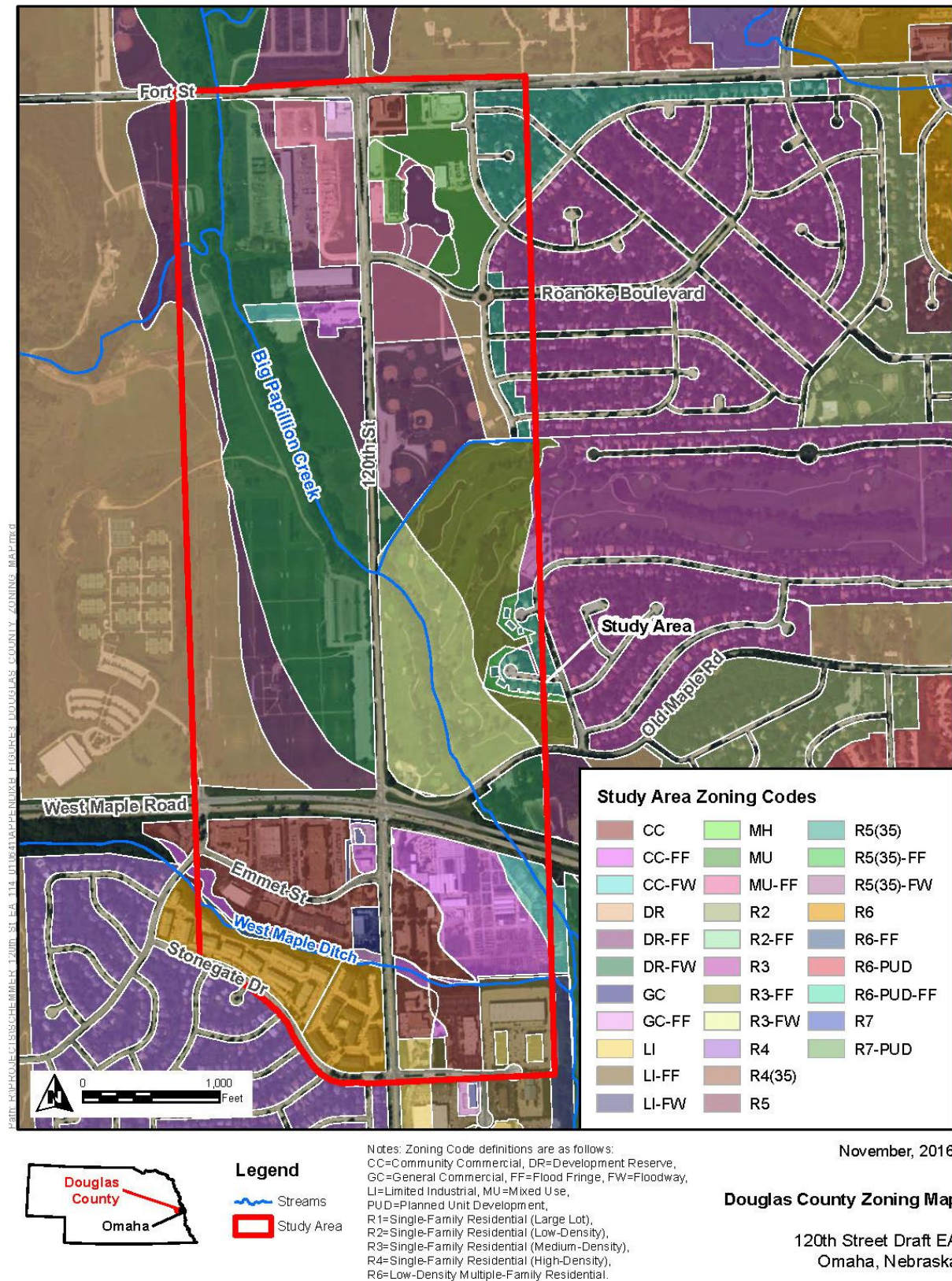


Figure 7. Douglas County Zoning Map

- Limited Industrial District (LI) and Limited Industrial District-Floodplain (LI-FF): The southeast corner of the Study Area is zoned as the Limited Industrial District. This district is intended to accommodate service type commercial and light industrial uses with relatively limited external effects in a high-quality environment. These use types generally have lower traffic volumes than other commercial and industrial uses. This district provides for conditional approval of other uses with moderate but controllable effects. This district, combined with performance standards, is appropriately located in both suburban and central city industrial areas, particularly those near to residential and commercial districts.
- General Commercial District (GC) and General Commercial District/Floodplain (GC-FF): There are four parcels located south of West Maple Road that are zoned as General Commercial District. This district is intended for a wide variety of commercial uses and limited industrial facilities. Uses allowed in this district may generate sufficient traffic or have operating characteristics which make them generally incompatible with residential areas or lower intensity commercial and office districts. Land in this district requires access from major streets, primarily minor and major arterials.
- Low-density Multiple-family Residential District (R-6): The residential area located in southwest portion of the Study Area along Stonegate Boulevard is zoned as Low-density Multiple-family Residential District. This district is intended to provide locations for low-density multiple-family housing in the approximate range of 20 dwelling units per acre. It provides for the integration of such buildings with lower density housing types, including single-family, duplex and townhouse residential. This district applies to established neighborhoods, including those where the limited conversion of large single-family houses is necessary to extend their economic life; areas in which a mix of single- and multiple-family housing is appropriate to create an urban neighborhood; transitional areas between lower and higher intensity uses; and developing multiple-family areas.
- Mixed Use (MU) and Mixed Use/Floodplain (MU-FF): The parcels located adjacent to 120th Street north of Big Papillion Creek are zoned as Mixed Use. These areas include an undeveloped field, parking lots, and retail and office buildings. This district is intended to accommodate projects that combine several compatible land uses into an integrated development consistent with the goals and policies of the land use and urban design elements of the city's comprehensive plan. It is the policy of the city to adopt this district in connection with rezoning of areas for projects that include commercial uses. This district allows for mixing residential environments with workplaces, shops and services in a manner that encourages these residential, commercial, offices and accessory uses to occur in pedestrian-oriented mixed use centers of varying build-out sizes at those intersections designated for mixed use areas rather than in continuous strips along arterial streets. Development in this district must also accommodate transportation systems, surrounding environments and pedestrian movement.
- Urban Family Residential District (R5): Parcels located along the eastern edge of the Study Area are zoned as the Urban Family Residential District. This district is intended to provide medium-density residential neighborhoods with single-family characteristics, while allowing considerable latitude in the physical design of housing. This district permits single-family residential housing, duplexes and townhouses. It is adaptable to both established and developing neighborhoods, as well as to transition areas between single-family and multiple-family development.
- Single Family Residential District/Floodway Overlay District (R3-FW) and Single Family Residential District/Floodplain (R3-FF): The Knolls Golf Course is zoned under this district. This district includes moderate-density residential neighborhoods, characterized generally

by single-family dwellings on medium-sized lots with supporting community facilities. This district allows for several development options for single-family residential construction. It provides for conditional approval of community facilities which generate larger quantities of traffic than permitted residential uses. This district is appropriate for established parts of the city, where it serves to preserve existing single-family neighborhoods while promoting development of infill housing, and for newly developing neighborhoods.

Land Use

The existing land uses in the Study Area are well established. The majority of the Study Area is built-out or occurs within Tranquility Park. The City of Omaha's Master Plan (City of Omaha, 2012d) has designated the following future land uses for the Study Area: Mixed Use/Office Commercial (south of West Maple); Open Space (Tranquility Park, The Knolls Golf Course, and ball fields); and Low Density Residential (north of Roanoke Boulevard) (City of Omaha, 2012a). The "Land Use Element" section of The Omaha Master Plan includes the following general references to proposed developments in and/or around the Study Area that could affect overall land use:

- Development of West Maple Road into a major public transportation route utilizing the Metropolitan Area Transit bus system.
- Development of medium-density single-family and high-density multiple-family residential structures north and south of major streets, such as West Maple Road, in order to develop a population density capable of supporting a mass transit system. The City's target population density is eight dwelling units per net residential acre.
- Continued development of mixed-use commercial/residential areas at intersections of major streets, such as the intersection of 120th Street and West Maple Road, to develop a population density capable of supporting a mass transit system.
- Regulation of floodplain development within the Papillion Creek Watershed so that new development does not raise the surface water elevation or increase the rate of water run-off.
- Continued acquisition of existing buildings in the floodplain through voluntary buyout program funded by governmental entities.

The "Parks Element" section of The Omaha Master Plan includes the following general reference to proposed developments in and/or around the Study Area.

- Development of an interconnected trail system leading to parks, including Tranquility Park, located throughout the City.

According to development plans posted near the intersection of 120th Street and Roanoke Boulevard, private landowners' short-term development plans include the following change to current land use in the Study Area:

- Conversion of the previously undeveloped area east of 120th Street located between the little league baseball fields and Fort Street into a multiple-structure commercial development. Once finished, the development would contain four retail buildings, nine office buildings, one daycare center, one bank, two fast food restaurants, a 2.8-acre pond, and several parking lots, trees, and green spaces. To date, construction of one retail building, one office building, the pond, and several parking lots has been completed.

Various access points to individual businesses and facilities would be closed and/or altered as part of the Project. South of West Maple Road, the median would be closed at Emmet Street, which would close access to Mulhall's on the east side. A new primary access to Mulhall's would be created 300 feet south of the existing secondary access. Additionally, a permitted U-turn movement would be allowed for northbound traffic on 120th Street at West Maple Road, and an additional lane would provide U-turn width and right turn storage between West Maple Road and Emmet Street. The access at Old Maple Road would be reduced to a right-in-right-out, and the south access to Tranquility Park would be eliminated. Two access points would be maintained for the Park. Access points to Keystone Little League would be reduced from three to two and repositioned, and businesses on the west side of 120th Street in the vicinity of Roanoke Boulevard would be reduced to right-in-right-out. A permitted U-turn movement would be allowed at Roanoke Boulevard and 120th Street.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, the Project would not be constructed. There would be no changes in land ownership, jurisdiction, or land use related to the Project.

Preferred Alternative

The Preferred Alternative would require the acquisition and permanent easement of approximately 0.6 acre of private property from six parcels. The exact amount of required ROW would be determined during final design. The property would be acquired from private landowners, and would become public ROW for transportation use. Acquisition of 2.35 acres of City of Omaha property would also be required from two parcels. The acquisition of the ROW within Tranquility Park and The Knolls Golf Course is discussed in detail in **Section IV.F** (Section 4(f) of the Transportation Act). Temporary easements for construction would be acquired for all 23 properties along the corridor that are not owned by the City of Omaha. Following construction, the temporary easements would be returned to their existing use.

The ROW and easements would be purchased with a combination of federal and local funds. There would be a 20 percent local match of federal funds. ROW acquisition would be conducted by payment of fair market value for the property rights and damages that may occur as a result of the taking. ROW acquisition would be completed in conformance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 United States Code [USC] 4601 et seq.), and the Nebraska Relocation Assistance Act (Neb. Stat. Section 76-1214 et seq.).

Existing traffic patterns in the Study Area would be temporarily disrupted to a degree during the construction period. Local access to properties along 120th Street would still be maintained during construction, however. Some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. Based on the traffic capacity considerations addressed in the introduction to this chapter, the temporary increase in traffic on alternative routes is not expected to have identifiable impacts on properties and land uses along those routes.

Long-term access to individual businesses and other facilities would be altered under the Preferred Alternative. Where access points have been eliminated, alternate options, such as U-turn lanes would be provided; therefore impacts are expected to be minor. Details for the access

restrictions and alterations would be coordinated with the private business owners prior to final design.

The Preferred Alternative is in conformance with the STIP, and existing and future land use plans. Minor permanent impacts to land ownership, jurisdiction, and land use would occur through the Project's ROW acquisition. Temporary impacts to land use, from construction, would also occur, but would be minor. The Preferred Alternative could have beneficial impacts to land use from improved traffic flow, vehicle safety, and pedestrian access.

Mitigation

- Impacts of ROW acquisition would be offset by payment of fair market value for the property rights and damages that would occur as a result of the undertaking. The Uniform Relocation Assistance and Real Property Act of 1970, as amended, would be followed. (City of Omaha)
- Access to the individual businesses, parks, ball fields, golf course, and other facilities would be maintained during construction. (City of Omaha, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The following standard specifications pertain to land ownership, jurisdiction, and land use:

- Standard Specification 105.12 – Control of Work – Use of Land (NDOR, 2007)
- Standard Specification 104.08 – Scope of Work – Final Clean Up (NDOR, 2007)
- Standard Specification 107.12 – Legal Relations and Responsibility to the Public – Responsibility for Damage, Injury, or Other Claims (NDOR, 2007)
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

C. Socioeconomic Considerations

Summary

The socioeconomic issues related to the road improvement Project would be limited because they would occur in the same general location as the existing road. The issues considered in this discussion include such items as permanent or temporary, and direct or indirect, changes or impacts to: populations and communities, housing availability and displacement, and the local economy. These broad categories encompass such issues as travel patterns and accessibility; school districts and their operations (busing); recreational facilities; police, rescue and fire protection; highway safety; and impacts to businesses.

Affected Environment

The Study Area lies within the northwestern portion of the City of Omaha, Douglas County, Nebraska. The Omaha-Council Bluffs, Iowa, metropolitan statistical area (MSA) provides a diverse economic base with employment distributed relatively evenly among the private non-farm sectors. Government provided the largest source of employment in the metropolitan area in 2010,

and Health Care and Social Assistance and Retail Trade were the largest private employment sectors (BEA, 2012).

As of July 2012, the Omaha-Council Bluffs MSA alone provided a labor force of 472,095 workers, about 4.7 percent of which were unemployed; Douglas County's workforce was 285,809 with an unemployment rate of 4.9 percent. These unemployment rates are higher than the Nebraska state average of 3.8 percent at the same time but much lower than the national average of 8.3 percent (BLS, 2012).

The City of Omaha maintains a transportation infrastructure that has been designed to efficiently move commuters into and out of the city. Included in the system is 120th Street. This street provides north-south travel in the northwest section of the city into the neighborhoods and businesses in the area and recreation facilities at Tranquility Park. It is linked from the Study Area to the Omaha interstate system and the communities, employment opportunities, goods, and services in the area via West Maple Road and Fort Street and is an integral part of the city's infrastructure.

Demographic data obtained from the U.S. Census Bureau showed that Omaha is a growing city with about 4.9 percent growth between 2000 and 2010, from 390,007 people to 408,958. The City's growth rate was below that of Douglas County (11.5 percent) and Nebraska (6.7 percent) (USCB, 2010j and 2000). Additional detail regarding the demographic data of the Study Area is presented in greater detail in **Section D** (Title VI / Environmental Justice).

2010 Census data indicates that approximately 91.6 percent of the 177,510 housing units in the City of Omaha were occupied. Approximately 14,891 units were vacant. Of these vacant units, approximately 52.8 percent (7,862 units) were available for rent and roughly 13.0 percent (1,931 units) were available for sale. Within the Census Tracts covered by the Study Area (Tracts 74.32, 74.33, 74.39, and 74.40; **Figure 8**), approximately 382 units out of a total of 6,263 were vacant, 296 of which were for rent and 42 were for sale. As the area covered is further refined to reflect the boundary of the Study Area, the amount of housing vacancy decreases. Within the Census Block Groups in the Study Area, approximately 180 out of 3,388 units were vacant; and within the Census Blocks covering the Study Area 126 out of 1,865 units were vacant (USCB, 2010c, 2010d and 2010e).



Figure 8. Study Area Census Tracts and Census Blocks

An array of public services, facilities, and utilities are provided within the City of Omaha and the Study Area. These include recreation facilities and parks; electric power, natural gas, wastewater, potable water, fiber optic cable; telephone cable utilities; police, fire, and rescue services; hospitals; metro bus express routes; and schools. The Omaha Metro Express Route 98 (Maple Village Express) runs through the southern portion of the Study Area, along 120th Street from Miami to West Maple Road, where it continues on West Maple Road to the east. There is one bus stop near 120th Street and Emmet Street within the Study Area. Tranquility Park is located adjacent to the Project along 120th Street. The City of Omaha operates Tranquility Park, which offers eight lighted ball fields, 17 soccer fields, 18 unlit tennis courts, six lit tennis courts, open space, and a playground (City of Omaha Parks and Recreation, 2012). The City of Omaha also operates The Knolls Golf Course. There are also private recreational opportunities adjacent to the Project. These include Schmidley's Family Golf Range and Keystone Little League baseball fields. These amenities are further described in **Section IV.F** (Section 4(f) of the Transportation Act) and **Section IV.G** (Section 6(f) Land and Water Conservation Fund Properties). Utility providers in the Study Area are described in **Section IV.I** (Utilities).

The Omaha Police Department provides the crime prevention, law enforcement, and public safety services for the Study Area. In addition to the Central Station at 15th and Howard and the Community Resource Center Crime Prevention Unit at 103rd Street north of Fort Street, the city has four police precincts: Northeast Precinct at 30th and Taylor, Northwest Precinct at 103rd Street north of Fort Street, Southeast Precinct at 25th and Vinton, and Southwest Precinct at 99th and M Street. The Study Area is in the Northwest Precinct in Patrol District 12 on the west side of 120th Street and Patrol District 13 on the east side (OFD, 2012a). The Omaha Fire Department provides 25 fire stations throughout the city (OFD, 2012b), fire prevention education, emergency medical response coordination, two hazardous materials response units, and a mass casualty decontamination system. In addition to performing duties of truck and engine companies, the hazardous materials response units and Task Force members also respond to hazardous materials incidents, high angle rescue, confined space rescue, and trench rescue (OFD, 2012c).

The Fire Department Emergency Medical Services Bureau Chief coordinates medic unit response with all Class II emergency rooms and their medical directors. Medic units, along with Emergency Response Teams Airworthiness Directive and Advanced Life Support engine companies, are manned on a 24-hour basis. Additional responsibilities include all administrative, equipment, liaison and training functions. This bureau also oversees the Department's Infectious Disease Control program (OFD, 2012a).

Within the Greater Omaha area, there are 15 hospitals including Nebraska's only Children's Hospital and Medical Center. The University of Nebraska Medical Center and the Creighton University Medical Center are research facilities with programs in bioterrorism response, cancer research and transplantation. Alegent Health has five locations in the metropolitan area, and Methodist Health System has several facilities (GOEDP, 2012).

As of the 2010-2011 school year, the City of Omaha was served by 11 public school districts (NCES, 2012). Schools with home attendance service areas covering the Study Area include: Sunnyslope Elementary, Joslyn Elementary, Fullerton Magnet Elementary, Alice Buffet Middle Magnet, Morton Middle Magnet, Beveridge Middle Magnet, Burke High and Northwest High Magnet. Transportation is provided to students attending home attendance area schools if the students reside a long distance away. (OPS, 2012). Both 120th Street and Fort Street in the Study Area are school bus routes for Omaha Public Schools.

There are currently 13 colleges and universities in in the City of Omaha with an enrollment of almost 52,000 students during the 2010-2011 school year (GOEDP, 2011). These colleges and universities have student populations that reside in the city and the surrounding areas. It is expected that a portion of these students would use the 120th Street corridor as a means to access their respective schools.

Environmental Impacts

No Build Alternative

The No Action Alternative would have no significant impacts to social cohesion, economic vitality or opportunities, or school attendance. However, the No Build Alternative would likely result in increased traffic congestion along 120th Street between Fort Street and West Maple Road, based on observed increases in traffic and travel times and on the Census data indicating population growth in the city. Delays and congestion could have both social and economic effects in the long term that would be less than significant. Increased commute times to work for study area residents could increase the percentage of a family's income spent on gasoline and result in social dissatisfaction. Congestion could delay consumers and employees reaching the businesses located along West Maple Road and recreation opportunities along 120th Street. In addition, the ability of emergency services and school buses to provide timely service would continue to be hampered by continued and potentially increasing congestion along 120th Street.

Preferred Alternative

Construction of the Preferred Alternative is expected to take approximately two years. The preferred alternative would be built under the following conditions. South of West Maple Road, the 120th Street southbound lanes would be reconstructed while the 120th Street northbound lanes would be utilized for existing two-way traffic. A second stage south of West Maple would reconstruct northbound lanes with existing two-way traffic on southbound lanes. The portions of West Maple Road being reconstructed would utilize on-site temporary pavement widening. The temporary widening would allow a traffic shift to accommodate West Maple Road traffic during reconstruction of the eastbound and westbound lanes. 120th Street north of West Maple Road to south of Roanoke Boulevard would be closed to through traffic, and message boards identifying two alternative routes via 132nd Street or 108th Street would be placed at West Maple Road and Fort Street one week prior to and during the period 120th Street is closed to through traffic. The temporary increase in traffic on these alternative routes is not expected to affect access to community facilities and services on 132nd Street or 108th Street. North of West Maple Road, local access would be maintained at all times to areas served by 120th Street. Additional measures would be employed to minimize the effects to school bus routes, Omaha Metro bus routes, emergency services routes, truck delivery for manufacturing and businesses, commuter traffic, traffic transporting goods and services, as well as general traffic during construction equipment movements and material deliveries. Access to Tranquility Park, The Knolls Golf Course, individual businesses, residences and other recreational facilities in the area would be maintained during construction. Measures to maintain public access for the facilities and services described above along the northern segment of 120th Street include phasing of construction, creating a temporary road within the West Maple Road corridor, and public notification prior to commencement of construction to allow for route planning and adjustments if needed.

Construction of the Preferred Alternative would have short term beneficial impacts to local area employment over the two-year construction period. Increased employment in the local construction industry is not anticipated to result in greater housing demand, since it is expected

that this workforce would be derived from the local workforce within commuting distance to the Project site.

Long-term impacts of the Preferred Alternative would be beneficial, allowing for increased mobility, reduced delays for the local community in reaching community facilities, businesses, and places of employment, reduced response times for emergency services, and reduced commute times for buses traveling along 120th Street. The proposed improvements would increase access to commercial establishments, mainly near the intersection of 120th Street and West Maple Road, which could improve the contribution of these businesses to the local economy. Also, improved pedestrian accessibility and traffic safety would enhance the social well-being of the communities in the Study Area.

Overall access to existing community and recreation facilities would be retained or improved by the roadway upgrades; however, some specific access locations would be eliminated to promote public safety and maintain traffic circulation. In particular, the upgrade of the roadway south of West Maple Road would permanently close two of the existing primary access drives to Mulhall's on the east side of the roadway, which would have the potential to limit Mulhall's business activity. However, a new primary access to Mulhall's would be provided at a location 300 feet to the south, where a secondary access to Mulhall's already exists. Coordination with Mulhall's has been conducted to achieve a solution that would maintain sufficient access to this business. In addition, access management along 120th Street near Old Maple Road would eliminate the southernmost of three existing access drives to Tranquility Park; however, two access locations would be maintained for Tranquility Park at a safe distance from the 120th Street and West Maple Road intersection.

Modifications near Roanoke Boulevard would result in a reduction in the number of community access locations to the Keystone Little League property. Two of the existing entry points would be permanently closed, and a third would be converted to right-in, right-out access only. A new permanent access drive would be constructed near the middle of the property, however, and sufficient long-term access would be retained along the east side of 120th Street to allow for parking and public use of these facilities. Because access to the Keystone Little League property would be maintained during construction, there would be minimal temporary impacts to public use. In addition, MSE walls would be installed during construction to enhance public safety. Although access locations to parking at the Keystone Little League property would be reduced to two, these new access points would be repositioned to maintain circulatory needs within parking areas and would have no adverse long-term effects on public use of this facility.

Access to properties along the west side of 120th Street would be retained in existing locations, which would ensure connectivity between communities and public amenities. Impacts to the privately owned Schmidley's Family Golf Range on the west side of the northern end of the project would include acquisition of a very narrow strip along the eastern edge of the property, removal of existing trees along the eastern side of the range, and permanently restricting the two access drives to right-hand turns in and out of the property. Impacts to the property would be identified and compensated for in the right-of-way appraisal process. However, these changes are not anticipated to affect the level of business at this facility.

The City of Omaha has coordinated with the affected businesses during project planning and EA scoping and development, and will continue coordination throughout construction. Input received during scoping is summarized in Chapter V. More detailed information about input received through coordination with various entities, including representatives of the three businesses discussed above, is provided in **Appendix E, Agency and Public Coordination**.

The City of Omaha requested Metro review the proposed project to determine potential impacts to Metro's services. Metro determined the project would have minimal impacts to bus service along 120th Street (**Appendix E, Agency and Public Coordination**). The bus stop at the northwest corner of 120th Street and Emmet Street would be relocated to the southwest corner to the intersection during construction. Additionally, the Metro Express 98 bus route would be detoured during construction. The route turns left onto 120th Street southbound from W. Maple Road. The detour would have the route turn left onto 124th Street then left onto Emmet Street with a right turn onto southbound 120th Street.

Mitigation

- Per Standard Practice, The City of Omaha shall notify the public at the start of construction by placing notices in the newspaper 14 calendar days prior to construction, and electronic message boards may be used prior to the beginning of construction activities. (City of Omaha)
- The City of Omaha shall also notify emergency services such as police and fire departments before construction activities begin, as well as maintain continued coordination throughout construction. Emergency services providers would be invited to the pre-construction meeting for this Project. (City of Omaha)
- Mitigation measures will be part of the final design of the Project and would include the following:
 - notifying individuals affected by construction, as well as those travelling through the corridor during construction (City of Omaha),
 - coordinating with Metro for temporary rerouting of Omaha Metro Express Route 98 (City of Omaha),
 - Communicating with all local properties in the Project to ensure temporary access is provided during construction (City of Omaha, Contractor), and
 - Coordinating with neighborhood groups, emergency services, and businesses during construction to maintain access during construction (City of Omaha).
- Access to Tranquility Park, The Knolls Golf Course, individual businesses, residences and other recreational facilities in the area would be maintained during construction (Contractor).
- Measures that would be employed to minimize the effects to school bus, Omaha Metro, and emergency services routes; truck delivery for manufacturing and businesses; commuter traffic; traffic transporting goods and services, as well as general traffic during construction equipment movements and material deliveries include:
 - phasing of construction,
 - creating an on-site temporary road to maintain through traffic on West Maple Road and public access to the facilities and services along 120th Street near West Maple Road, and
 - notifying the public prior to commencement of construction to allow for alternative route planning and adjustments if needed. (City of Omaha, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to socioeconomics includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

D. Title VI / Environmental Justice

Summary

Title VI of the Civil Rights Act of 1964 (Title VI) ensures that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, national origin, age, sex, and disability (42 USC 2000d et seq.). Executive Order (EO) 12898 on environmental justice directs that programs, policies, and activities not have a disproportionately high and adverse human health or environmental effect on minority and low-income populations (59 FR 7629). Executive Order #13166 (Limited-English-Proficiency [LEP]) directs federal agencies to evaluate services provided and implement a system that ensures that LEP persons are able to meaningfully access the services provided.

Affected Environment

To be consistent with the requirements of Title VI and EO 12898, the demographic characteristics of the Study Area were examined to determine whether the Project would disproportionately affect minority or low-income populations. These characteristics of the Study Area were compared with those of Douglas County in Nebraska using data from the U.S. Department of Commerce, Bureau of Census, 2010 Census of Population and Housing (USCB, 2010f, 2010g, 2010h, and 2010i). The economic character of the Study Area was estimated using the US Census Bureau 2009-2013 American Community Survey Five-Year Estimates (USCB, 2013). The portion of the population below the poverty line was used as a proxy to measure low income status for this analysis.

As identified in the 2010 Census, the percentage of minority population (including Black or African American alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian and Other Pacific Islander alone, and Hispanic or Latino) in Douglas County was 28.1 percent (USCB, 2010l).

The 2009-2013 American Community Survey Five-Year Estimates for Douglas County (USCB, 2013) estimates a median household county income of \$53,325 and a poverty rate of 14.3 percent.

As shown in **Table IV.1**, small portions of the Census designations encompassing the study area have minority populations. These areas are described in detail in **Appendix H** and also are shown in **Figure 9**.

A review revealed that no LEP outreach is required for this project because, in the areas surveyed, none of the data indicates the presence of an LEP population that reaches the NDOR LEP outreach triggers of 5 percent of the population or 1,000 persons.

Table IV.1. Protected Populations within the Study Area

Protected Population Designation	Protected Population Qualifier	Douglas County Threshold	Census Unit(s) Above Threshold	Protected Population Abundance
Low Income	Percent Below the Poverty Line	14.3%	Census Tract 74.40	23.2%
Minority	Percent Minorities	28.1%	Census Tract 74.33: Block: 5000 5013 Census Tract 74.39: Block: 5016 Census Tract 74.40: Block: 1000	38.0% 30.0% 34.4% 29.8%

Source: USCB, 2010a, 2010b, 2010f, 2010g, 2010h, 2010i, and 2010l

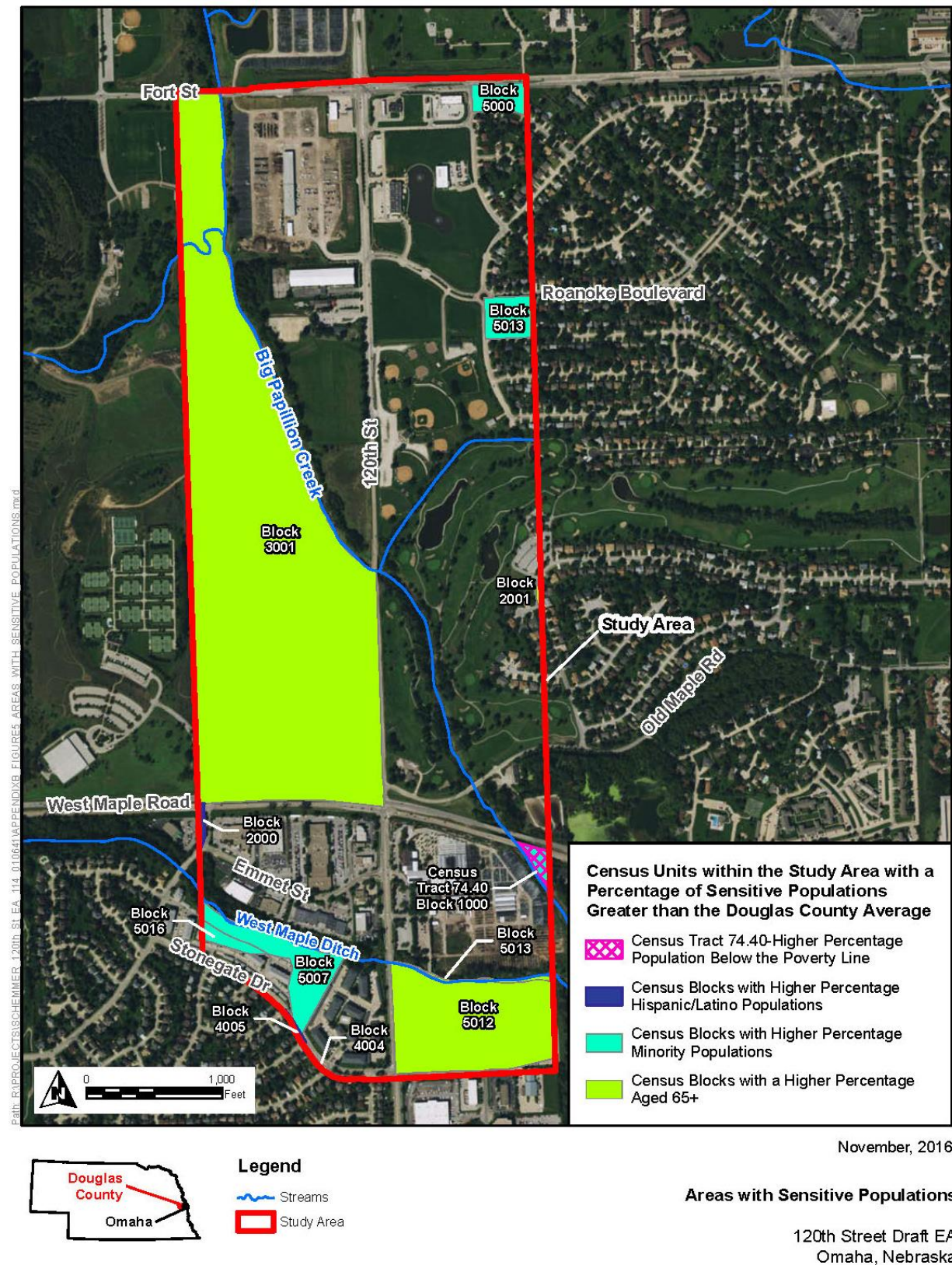


Figure 9. Areas with Sensitive Populations

Environmental Impacts

No Build Alternative

The No Build Alternative would not result in disproportionately high and adverse effects on low income minority populations, or LEP populations relative to the general population. Under the No Build Alternative, continued and potentially increased congestion and travel times and public safety concerns would be experienced universally among the residents of in the Study Area, the City of Omaha, Greater Omaha, and Douglas County traveling the stretch of 120th Street between Fort Street and Stonegate Drive.

Preferred Alternative

The Preferred Alternative would result in no disproportionately high and adverse effects on low income minority populations, or LEP populations relative to the general population. No residents would be relocated and access to community facilities and parks, businesses, emergency services, and schools would be maintained for all residents during construction through phasing, construction of a temporary road along West Maple Road, and appropriate timing of lane closures. Any short term delays would be borne by all users of the roads in the Study Area. The temporary road along West Maple Road would not displace local residents, businesses, or neighborhood facilities and would not restrict access to them. It would maintain access for all residents, workers, and visitors, including potential environmental justice populations. In the long term, access and travel times for residents, buses, and police, fire, and rescue services would be improved for all Study Area residents and travelers along 120th Street.

A portion of one area with potential environmental justice populations are within the limits of construction of the Preferred Alternative. The area with potential environmental justice populations within the LOC is a portion of Census Tract 74.40, which had a relatively high population percentage below the poverty line. However, none of the residences of the populations within this area would be affected by construction or require relocation. None of the sensitive populations would be more affected than the general public by changes in access, temporary alternative routes, delays, or closures during construction, nor would the non-sensitive residents of these areas be affected more than the general public. Approximately 0.01 acre of Census Tract 74.40 along West Maple Road, which had a relatively high population percentage below the poverty line, would be temporarily disturbed by construction. Approximately 8.25 acres within the temporary limits of construction would be in Census Tracts that did not have a high population percentage below the poverty line or other environmental justice populations. The Blocks within the LOC include mainly the parking area in Tranquility Park and the western edge of the ball fields on the east side of 120th Street, much of which are in the existing ROW. None of the population (no environmental justice populations or non-sensitive populations) in the Study Area resides within the LOC.

As identified in Section III.C, traffic would be directed off-site during construction of the segment north of West Maple Road to just south of Roanoke Boulevard, and alternate routes via 132nd Street and/or 108th Street would be identified. No environmental justice populations are present along this segment of 108th Street (**Figure 10**). Several areas with relatively high concentrations of minority populations are identified in Census data along 132nd Street. These populations are identified in **Appendix H Table IV.8**, which shows the distribution of minority populations in the Census Tracts along 108th Street and 132nd Street between Fort Street and West Maple Road. Environmental justice impacts are not anticipated, since additional traffic along these two streets in this area would affect all populations equally and is expected to be of limited duration and dispersed between 108th Street and 132nd Street.

Long term noise effects would occur at two noise receptors within the Keystone Little League Fields. These impacts would not occur within an area identified as having potential environmental justice populations, as shown in **Figure 8**. Census Block 5013, which has a higher percentage of minority populations, is adjacent to the northeast corner of the little league fields and noise would be buffered by the presence of the field, which would add distance from noise generated by 120th Street. Neither Census Block 5013 nor the other three residential Census Blocks adjacent to Keystone Little League Fields, which did not have greater than average environmental justice populations, was identified as a sensitive noise receptor (see **Figures 8 and 9**). In addition, this location is currently subject to elevated noise levels and is not in constant use. Exposure to elevated noise levels would occur adjacent to the road and would not be constant for any single user group within the facility, including environmental justice and youth populations.

Issues regarding safety during construction would also affect the general population but most particularly those residing in the Study Area and those using Tranquility Park, The Knolls Golf Course, and the ball fields and tennis facilities surrounding 120th Street. The two noise receptors that would be affected by project construction noise are located in the Keystone Little League Fields. However, standard construction safety procedures would be employed to protect the public during this short term activity. Noise impacts would be minimized by working within the time constraints of applicable local municipal ordinances; if any work is required during nighttime periods, all required permits would be obtained from the local municipality. These permits are likely to include conditions and restrictions on specific activities during nighttime hours to reduce the impact of construction noise on adjoining properties.

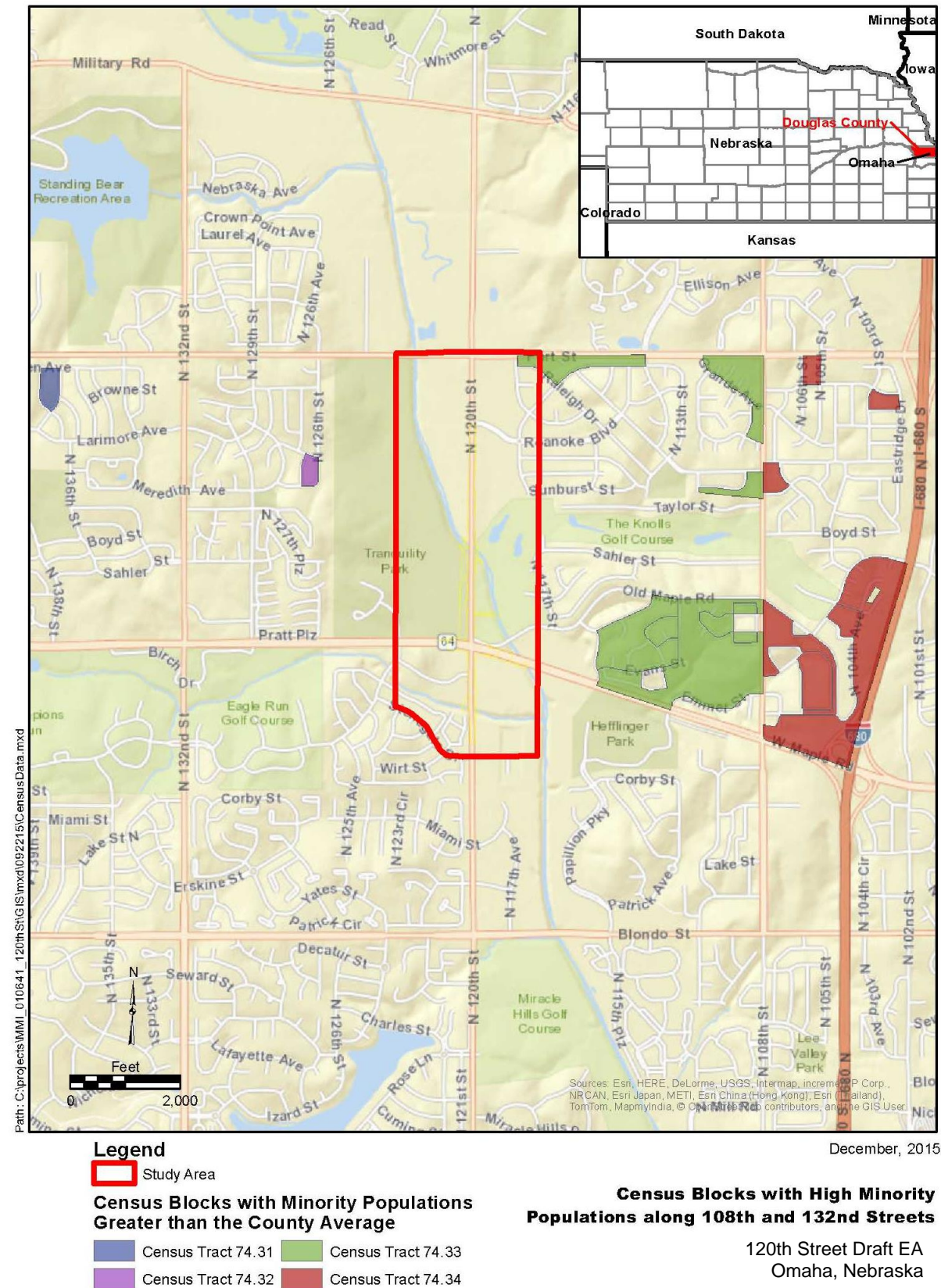


Figure 10. Census Blocks with High Minority Populations along 108th and 132nd Streets

Mitigation

If nighttime work with lights is needed during construction (an action that is not currently assessed in the EA), the effects of this use on adjacent populations would be reevaluated during final design. (City of Omaha)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to environmental justice includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

E. Cultural Resources

Summary

Section 106 of the 1966 National Historic Preservation Act (NHPA), as amended, requires that federal agencies take into account the effect of its undertakings on properties listed in or eligible for listing in the National Register of Historic Places (NRHP) and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking. The City of Omaha, as a non-federal party, assisted the FHWA, through NDOR, in meeting its obligation under Section 106 of the NHPA by conducting field surveys and evaluations required by ACHP regulations in 36 CFR 800.

Affected Environment

The Area of Potential Effect (APE) for cultural resources includes a 200-foot buffer along the centerline of 120th Street. Prior to conducting field surveys, the Nebraska Historical Society Highway Archaeology Program Manager (HAP) conducted archaeological resource databases and historic map reviews within the immediate Project vicinity. This review indicated that no known historic or prehistoric archaeological sites have been previously recorded in the review area (DOT, FHWA, 2010).

On November 19, 2010, a HAP conducted an archaeological reconnaissance field survey in the APE. No archaeological sites were discovered, and it was determined that the undertaking would have no potential to effect archaeological and/or historic properties (DOT, FHWA, 2010).

In addition, FHWA consulted with the Nebraska State Historic Preservation Office (NeSHPO) regarding standing structures. A review of the *Nebraska Historic Resources Survey & Inventory* database revealed that there were no previously recorded properties within the Study Area. The NDOR Master Bridge List was also consulted and it was determined that the structure to be removed was not included on this inventory of bridges and is not eligible for listing on the NRHP. During the reconnaissance field survey, HAP performed a visual site inspection and identified no standing structures over 50 years in age within the Study Area (DOT, FHWA, 2010).

On January 11, 2011, NeSHPO concurred that the project would have *no potential to cause effect* to archeological historic properties or to structural or architectural historic properties. NeSHPO has granted clearance for this proposed Project, and no further cultural work is required (**Appendix C, Cultural Resources Consultation**).

Environmental Impacts

No Build Alternative

Based on cultural resources review of the Project, there have been no historic properties identified within the APE. Therefore it has been determined that there would be no effect to historic properties.

Preferred Alternative

Based on the survey results, no significant cultural resources or historic properties in the Study Area would be adversely affected by the proposed Project. The Project would cause increased human activity in the Project area in the form of Project workforce, particularly during construction; therefore, the Project would slightly increase the risk of disturbance, vandalism, collection, or excavation at undiscovered sites. However, measures presented in the Mitigation Section below would prevent impacts to currently unidentified cultural resources, and historic properties would be avoided by Project construction.

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for direct impacts to any cultural resources that may be present along those routes. Similarly, the temporary increase in traffic on the alternative routes would not involve the potential for indirect impacts to any cultural resources present.

Mitigation

No mitigation is required because no historic properties were identified.

- City of Omaha personnel and contractors would remain alert to the possibility of uncovering something of potential historic interest throughout construction. If previously unidentified archaeological resources are discovered in the course of the Project, all work would immediately be suspended in the vicinity of the find until the resources are properly evaluated in terms of the NRHP eligibility criteria (36 CFR 60.4) and NDOR Standard Specification 107.10 (pg. 60, 2007) in consultation with NeSHPO. In the event that human remains are uncovered, work would stop immediately and NeSHPO and the County Sheriff would be notified. (City of Omaha, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The following standard specifications pertain to cultural resources:

- Standard Specification 107.10 – Legal Relations and Responsibility to the Public - Archaeological and Paleontological Discoveries (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

F. Section 4(f) of the Transportation Act

Summary

The Department of Transportation Act (DOT Act) of 1966 includes a special provision, Section 4(f), which stipulates that the FHWA and other Department of Transportation (DOT) agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land.
- The action includes all possible planning to minimize harm to the property resulting from use (49 USC 303[c]).

A “use” of a Section 4(f) resource, as defined in 23 CFR 774.17, occurs: (1) when land is permanently incorporated into a transportation facility, (2) when there is a temporary occupancy of land that is adverse in terms of the statute’s preservationist purpose, or (3) when there is a constructive use of land. A constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from the Section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. For example, a constructive use can occur when:

- The projected increase in noise level attributable to the Project substantially interferes with the use and enjoyment of a noise-sensitive facility of a resource protected by Section 4(f);
- The proximity of the proposed Project substantially impairs aesthetic features or attributes of a resource protected by Section 4(f), where such features or attributes are considered important contributing elements to the value of the resource. An example of such an effect would be locating a proposed transportation facility in such proximity that it obstructs or eliminates the primary views of an architecturally significant historical building, or substantially detracts from the setting of a park or historic site which derives its value in substantial part due to its setting; and/or
- The project results in a restriction of access that substantially diminishes the utility of a significant publicly owned park, recreation area, or historic site.

Affected Environment

The project evaluated the potential to move the road improvements to an adjacent street to meet the purpose of the project and to avoid use of Section 4(f) resources. 120th Street is a major vein for commuter traffic in northwest Omaha and improving an adjacent street would not improve the traffic flow for this area. Therefore, moving the project would not address the purpose or need for this project.

There are two Section 4(f) resources within the Study Area: Tranquility Park and The Knolls Golf Course. The Study Area does not contain wildlife or waterfowl refuges, or any known archaeological or historical properties (see **Section IV.D**, Cultural Resources) protected by Section 4(f) of the DOT Act. There is a little league baseball facility and a driving range within the Study Area, but they are privately-owned and privately managed and not considered 4(f) resources. Keystone Little League owns the 20.323-acre baseball facility on the east side of 120th Street just north of the bridge over Big Papillion Creek. Improvements on this property include ball fields and a 2,450.3 square foot restroom and concession facility built in 1981, and a 2,700

square foot storage building, built in 1980. Schmidley's LLC owns the 15.1-acre driving range facility on the west side of the street, across from the little league ball fields. Improvements on the property include a 2,880 square foot retail store built in 1972 with a garage and a utility building and a 1,800 square foot storage warehouse built in 1986 with two additional utility buildings. It is open to the public for golf practice and driving range.

Tranquility Park is located west of 120th Street north of West Maple Road and is owned by the City of Omaha. It is a 340-acre park with eight baseball fields, 17 soccer fields, and 24 tennis courts. Access to the park is currently from three entrances off of 120th Street. The Park qualifies for protection under Section 4(f) because it is a public property used for recreation. Tranquility Park is currently being redesigned to accommodate larger soccer fields. Part of the scope of the renovation includes expanded parking to the south and north of the current parking areas along 120th Street.

The Knolls Golf Course, owned by the City of Omaha, is located on the east side of 120th Street north of West Maple Road, and is open to the public. It is an 18-hole, championship rated golf course with four lakes and a stream (Big Papillion Creek) running through the course. The total area of the golf course property is approximately 250 acres. The golf course qualifies for protection under Section 4(f) because it is a public property used for recreation.

FHWA participated in an agency scoping meeting for the Project in 2008 and discussions regarding the 4(f) properties have been ongoing. The Section 4(f) Programmatic Evaluation for Projects with Minor Involvement (23 CFR 774.3(d)) was approved by FHWA in October 2013 and is attached in **Appendix E**. This document discusses in detail the selection of alternatives to avoid or minimize use of the Section 4(f) resources that would be affected by the proposed Project.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, the Project would not be constructed and there would be no use of any Section 4(f) resources. Existing access to Tranquility Park and The Knolls Golf Course would be maintained and no ROW or easements would be required. The No Build alternative would not have a proximity impact (constructive use) that would impair the functions of the resources. However, the No Build Alternative is not feasible and prudent because it would not correct the existing capacity deficiencies or safety hazards, and not providing the improvements would constitute a community impact greater than the proposed use of the Section 4(f) resources.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. The temporary shift of traffic to the alternate routes would not constitute a "use" of any Section 4(f) resources (see the definition provided in the introduction to Section IV.F) that may be present along those routes, and would not result in direct or indirect impacts to any such resources present. (108th Street crosses the eastern portion of The Knolls Golf Course; no other features known or likely to be Section 4(f) resources are located along the alternate routes between West Maple Road and Fort Street.)

Tranquility Park

Approximately 7.5 acres of Tranquility Park (less than 3 percent of the total park acreage) would be affected by the Project, and 2.35 acres (0.69 percent) of the park would be acquired for the Project ROW. The remaining acreage would be within the temporary limits of construction and would not be permanently altered by the Project. Both temporary and permanent uses would occur at the southeast corner of Tranquility Park (see **Figure 3, Appendix E**).

Both the temporary and permanent uses of the park (land disturbance of Tranquility Park for construction and road ROW) would occur within the existing parking lot. Approximately 85 stalls would be removed in the row nearest to 120th Street. The parking lot would be widened to the west (creating up to 85 stalls) and extended to the south (creating an additional 60 stalls, if necessary) to ensure stalls are replaced at a minimum of one-to-one. Tranquility Park is currently being redesigned to accommodate larger soccer fields. Part of the scope of the renovation includes expanded parking to the south and north of the current parking areas along 120th Street. The Project design has been incorporated into the renovation plans.

Tranquility Park currently has three access drives. The south access to Tranquility Park would be eliminated, but two new access points would be constructed off of 120th Street to allow for one right-in-right-out access as well as one full movement access. Circulation would continue to be maintained by two north-south internal circulation lanes. On 120th Street, separate left turn lanes would be provided for vehicles entering Tranquility Park. Adding capacity on 120th Street would result in shorter traffic queues on 120th Street for vehicles entering and leaving the park, increasing efficiency and safety for northbound vehicles. In addition, these improvements would reduce the blockage of the southern access point by southbound traffic, reducing the potential for rear-end collisions in this area. Access to the park from 120th Street would be maintained using existing roads and temporary roads throughout the construction period, although the street would be closed to through traffic.

There would be minor uses of Tranquility Park from the Preferred Alternative. The primary use would be the conversion of 2.35 acres of the parking lot, where expansion was already planned, to permanent ROW so that alteration of current parking spaces would occur. The proposed bike trail, extending from West Maple Road along the east side of 120th Street and crossing under the bridge over Big Papillion Creek, would tie into the parking lot of Tranquility Park and would lie completely within the permanent limits of construction. However, because 2.35 acres of the park would be permanently transferred into ROW, this constitutes a direct use under Section 4(f) (when land is permanently incorporated into a transportation facility). No long-term impacts would occur to the existing sports fields or park amenities, and park users would be able access park facilities throughout construction. However, visitors could be subject to construction noise and safety restrictions during construction.

The Knolls Golf Course

Approximately 1.9 acres of The Knolls Golf Course (less than 1.5 percent of the golf course acreage of approximately 250 acres) would be affected by the Project, by temporary land disturbance during construction and permanent disturbance for the road ROW. Approximately 0.1 acre of the 1.9 acres that would be disturbed (0.07 percent of the total acreage of the property) would be used for the permanent Project ROW. Both the temporary and permanent disturbances would occur along the western edge of the golf course. The proposed bike trail, extending from West Maple Road along the east side of 120th Street, crossing under the bridge over Big Papillion Creek, and tying into the parking lot of Tranquility Park, would lie completely within the permanent

limits of construction. No additional impacts to The Knolls Golf course are anticipated as a result of the proposed trail. The Project was designed to minimize impacts to the golf course to the extent feasible, but portions of two fairways would be impacted south and north of Big Papillion Creek. There is no access to the golf course off of 120th Street; therefore access would not be impacted by the Project.

There would be minor impacts to The Knolls Golf Course from the Preferred Alternative (see **Figure 3, Appendix E**). Approximately 0.1 acre of the course would be permanently transferred into ROW, which constitutes a direct use under Section 4(f) (when land is permanently incorporated into a transportation facility). Much of the permanent disturbance to the two fairways at The Knolls Golf Course would occur in a narrow strip adjacent to 120th Street and within the stream banks of Big Papillion Creek for the proposed bridge modifications. The permanent changes that would occur in these areas would not affect the layout of the fairways nor would they impair the public's ability to play these two holes. Temporary disturbance during construction would likely generate noise that could affect the experience of golfers using these fairways during construction. However, they would not result in restricted play during construction or permanent restrictions. Although the entire culvert at the southern end of the fairway is identified as an area of temporary disturbance, construction activities would be limited to the portion of this area immediately adjacent to the 120th Street and would be unlikely to disrupt play on this fairway or result in temporary or permanent restrictions in activity at The Knolls Golf Course. It was determined that the City of Omaha owns the drainage structures and has an easement to maintain these structures. Therefore, ROW and easements would not be required for drainage modifications at this location, and no additional disturbance of Section 4(f) resources would occur. ROW would be acquired to one foot beyond sidewalks and three feet beyond the face of retaining walls. Permanent easements would not be acquired from Tranquility Park. It was determined that the City of Omaha owns the land and the installation of drainage structures does not permanently change the use of the 4(f) land.

Other Section 4(f) Considerations

The maximum allowable amount to be acquired from either Section 4(f) resource could not exceed one percent of the site's acreage to apply the Final Nationwide Section 4(f) Evaluation and Approval for Federally-Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges to the use of either Tranquility Park or the Knolls Golf Course for the Preferred Alternative. The maximum acreage to be acquired from Tranquility Park would comprise approximately 0.69 percent, and the maximum acreage to be acquired from The Knolls Golf Course would comprise about 0.07 acres. Therefore, permanent effects to either property would be below the threshold for minor involvements to public parks. It was determined that the City of Omaha owns the drainage structures and has an easement to maintain these structures. Therefore, ROW and easements would not be required for drainage modifications at this location, and no additional disturbance of Section 4(f) resources would occur. FHWA has indicated that use of each of these Section 4(f) resources for the Project is allowable under an FHWA Programmatic Section 4(f) Evaluation for Federally-Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands, Wildlife, and Waterfowl Refuges (see Appendix G for the approved evaluation). The requirements related to the Programmatic Section Evaluation are provided in **Appendix E** and FHWA's Environmental Review Toolkit web page on Section 4(f) evaluation (<http://www.environment.fhwa.dot.gov/4f/4fmparks.asp>)

The Programmatic Evaluation would not apply if a feasible and prudent alternative is identified, including a No Build Alternative; Improvement without using the Adjacent Section 4(f) Resources; and Alternatives on New Location. The No Build Alternative is examined above. It is not feasible

to avoid Section 4(f) resources by roadway design or transportation system management techniques because the Section 4(f) resources occur on both sides of the existing alignment in the same location, and therefore a shift that avoids both properties is not possible and a shift to avoid one property would significantly impact the other property. A bridge that spans the properties would result in a substantially increased roadway cost, and may not eliminate impacts entirely. It is not feasible to avoid Section 4(f) resources by constructing on new alignment because the new location would not solve existing transportation and safety problems and would result in substantial adverse social and economic impacts from disruption of established patterns. The new location would also substantially increase costs. All build alternatives along 120th Street would use Tranquility Park; any use of Tranquility Park would affect the parking lot, which is a less sensitive feature and use than any use of The Knolls Golf Course. In addition the City of Omaha Parks and Recreation Department has been planning to modify the parking lot in accordance to their Redevelopment Plan. The Preferred Alternative would result in the least overall harm to Section 4(f) resources.

On October 16, 2013, the City of Omaha Parks, Recreation, and Public Property Department concurred with the assessment that the anticipated impacts to Section 4(f) resources that would be affected by the Project with regard to all proposed actions associated with the Preferred Alternative would be minor and would not interfere with the protected amenities that constitute the protected Section 4(f) activities. FHWA's has approved the Programmatic Evaluation for the Project (see **Appendix E**).

Documentation related to the Programmatic Section 4(f) evaluation is provided in **Appendix E – Agency and Public Coordination**. FHWA approved the Programmatic Evaluation for the Project October 21, 2013.

Mitigation

To comply with all applicable Federal, State and local legislation, as well as any general or special conditions required by pending permits, mitigation measures/environmental commitments to minimize harm to Section 4(f) resources would have to be incorporated into the Preferred Alternative. These commitments would be implemented during the appropriate Project phase. Mitigation measures would comply with all applicable provisions of the City of Omaha's Best Management Practices as identified in the Omaha Regional Stormwater Design Manual, Chapter 8 Stormwater Best Management Practices (City of Omaha, 2006). (City of Omaha)

Mitigation measures would include the following:

- Maintain Tranquility Park access throughout the construction period. (City of Omaha, Contractor)
- Reseed all disturbed areas per the park/golf course design once construction activities have been completed. (City of Omaha, Contractor)
- Restore all temporary easements to preconstruction conditions or better once construction has been completed. (City of Omaha, Contractor)
- Maintain play at Knolls Golf Course without restrictions during construction. (City of Omaha, Contractor)
- Ensure that the footprint of construction/design would not impact the layout of fairways or impair the public's ability to play at Knolls Golf Course during final design. (City of Omaha, Contractor)

- Acquire ROW to one foot beyond sidewalks and three feet beyond the face of retaining walls. (City of Omaha, Contractor)
- Permanent easements would not be acquired from Tranquility Park. (City of Omaha)
- Maintain Knolls Golf Course access throughout the construction period. (City of Omaha, Contractor)
- Use of Tranquility Park for recreation would not be impacted during construction. (City of Omaha, Contractor)
- Replace an equivalent number of parking stalls to those removed at Tranquility Park by the Project by extending the parking to the west. (City of Omaha, Contractor)
- Replace Tranquility Park parking stalls prior to removal of the existing stalls to maintain public access. (City of Omaha, Contractor)
- Construct two new drives to replace the lost entrance for Tranquility Park. (City of Omaha, Contractor)
- Provide a set of plans or graphics showing the impacts to the Section 4(f) resources to the Tranquility Park management and the Knolls Golf Course management during final design, once the footprint is finalized. (City of Omaha, Contractor)
- Reevaluate the EA and Section 4(f) assessment if the footprint or impacts change from those disclosed in the Section 4(f) assessment or EA during final design. (City of Omaha, Contractor)
- Consult FHWA to determine if a reevaluation of the EA and Section 4(f) assessment is needed. (City of Omaha, Contractor)
- Provide additional mitigation or design changes if requested by the Tranquility Park or Knolls Golf Course management or if they raises concerns during final design. (City of Omaha, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to Section 4(f) of the Transportation Act include:

- Standard Specification 104.01 – Scope of Work – Intent of Contract (NDOR, 2007)
- Standard Specification 104.08 – Scope of Work – Final Cleaning Up (NDOR, 2007)
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.07 – Public Convenience and Safety (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

G. Section 6(f) Land and Water Conservation Fund Properties

Summary

Section 6(f) properties include outdoor recreation areas that were acquired or developed with funds from the Land and Water Conservation Fund (LWCF). Section 6(f) of the Land and Water

Conservation Act of 1965 (16 USC 4601) states that property purchased with LWCF funds should not be converted to other use. If a 6(f) site must be acquired, the law requires that the lands acquired be replaced with other property of at least equal fair market value and of reasonably equivalent usefulness and location. Conversion of Section 6(f) properties is administered by the U.S. Department of the Interior's National Park Service (NPS).

The conversion of LWCF properties in Nebraska is administered through the Nebraska Game and Parks Commission (NGPC). Projects involving conversions cannot move forward until the action has been approved by the NGPC and NPS. The approval process includes the following steps:

- Early consultation with NGPC to determine the size of the 6(f) resource impacted.
- Formal conversion proposal to NGPC including Proposal Description and Environmental Screening Form.
- NGPC submittal of the proposal to NPS following completion of the following prerequisites:
 - Evaluation and rejection of all practical alternatives
 - Fair market appraisal of the property
 - Review of appraisal by a Nebraska General Certified Real Property Appraiser
 - Determination of the equivalent usefulness of the replacement property
 - Determination of eligibility of replacement property
 - Consideration of a partial taking of the property
 - Coordination with other federal agencies
 - NEPA environmental review of the conversion and replacement land
 - Public notice
 - Site Plan/Plat Map/Timetable

Affected Environment

The same areas of Tranquility Park and The Knolls Golf Course that would have Section 4(f) impacts, described above in **Section F** (Section 4(f) of the Transportation Act), also qualify for protection under Section 6(f) because purchase of the land and its development was partially funded by the LWCF. No other properties protected under Section 6(f) occur in the Study Area.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, the Project would not be constructed and there would be no impacts to any Section 6(f) properties. Existing access to Tranquility Park would be maintained and no ROW or easements would be required.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and

132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for acquisition and conversion of any property purchased with LWCF funds that may be present along those routes.

Under the Preferred Alternative, approximately 7.5 acres of Tranquility Park (less than 3 percent of the total park acreage) would be impacted by the Project, and only a small portion of the Tranquility Park 6(f) property would be converted (2.35 acres or less than 1 percent) for the Project ROW (the same area noted in **Section IV.F: Section 4(f)** of the Transportation Act, see **Appendix E, Figure 3**). Both temporary and permanent impacts would occur at the southeast corner of Tranquility Park within the existing parking lot. The conversion of a portion of the 6(f) property resulting from the Project would not affect the recreational viability of the facility.

Approximately 1.9 acres of The Knolls Golf Course 6(f) property (less than 1.5 percent of the golf course acreage of approximately 250 acres) would be impacted by the Project, by temporary land disturbance during construction and permanent disturbance for the road ROW (the same area noted in **Section IV.F: Section 4(f)** of the Transportation Act, see **Appendix E, Figure 3**). Approximately 0.1 acre of the 1.9 acres that would be disturbed (0.07 percent of the total acreage) of The Knolls Golf Course 6(f) property would be acquired for the Project ROW. The Project was designed to minimize impacts to the golf course to the extent feasible, but portions of two fairways would be impacted south and north of Big Papillion Creek. The very small of amount and location of the land to be used by the Project would not impair the use of the golf course.

The only way to avoid conversion of the Tranquility Park 6(f) property for the widening of 120th Street would be to shift the ROW to the east side of the street. The shift to the east in this location would transfer the impacts entirely to The Knolls Golf Course, which also is a 6(f) property. Approximately 2 acres of the golf course would be required for the ROW, which would eliminate the use of an entire fairway and putting green. The fairway and putting green cannot be relocated or shifted further to the east due to Big Papillion Creek. The entire golf course would have to be re-designed at a significant cost and a much greater Section 6(f) impact.

The Preferred Alternative was designed to minimize impacts to both of the 6(f) properties. It was determined that placement of the ROW partially on the Tranquility Park 6(f) property would have less of an impact to public outdoor recreation because it would occur primarily within the existing parking lot and would be significantly less costly than a re-design of the golf course.

The City of Omaha Parks and Recreation Department are currently exploring alternatives for replacement of the Section 6(f) property in Tranquility Park. The NGPC was present during the 2008 and November 2012 agency scoping meetings; documentation of the meetings is provided in **Appendix E, Agency and Public Coordination**. Three potential replacement properties were identified. One property, Miller's Landing, was determined to be not feasible for Section 6(f) conversion due to its location across the Nebraska/Iowa state boundary and eliminated from further analysis. Two proposed Section 6(f) conversion properties were considered as replacement properties for the Section 6(f) resources that would be impacted by the proposed Project (**Figure 11**). Site 1 is located between Military Road and Fort Street, between 132nd Street and 120th Street. The total acreage required would be commensurate with the required mitigation for 6(f) conversion. Site 2 is located north of Democracy Park and northeast of the intersection of Fort Street and 90th Street. An environmental analysis was prepared to evaluate the suitability of both locations to ensure neither location had resource(s) that would prohibit the conversion. The

Section 6(f) Environmental Analysis indicates that for both Site 1 and Site 2, several resources were eliminated from further review because they either do not occur in the at the sites or were determined not to be affected by either site :

- Air quality
- Visual resources
- Wild and Scenic Rivers
- Platte River Depletions
- Noise
- Utilities
- Groundwater
- Material sources and waste materials, and
- Temporary construction impacts.

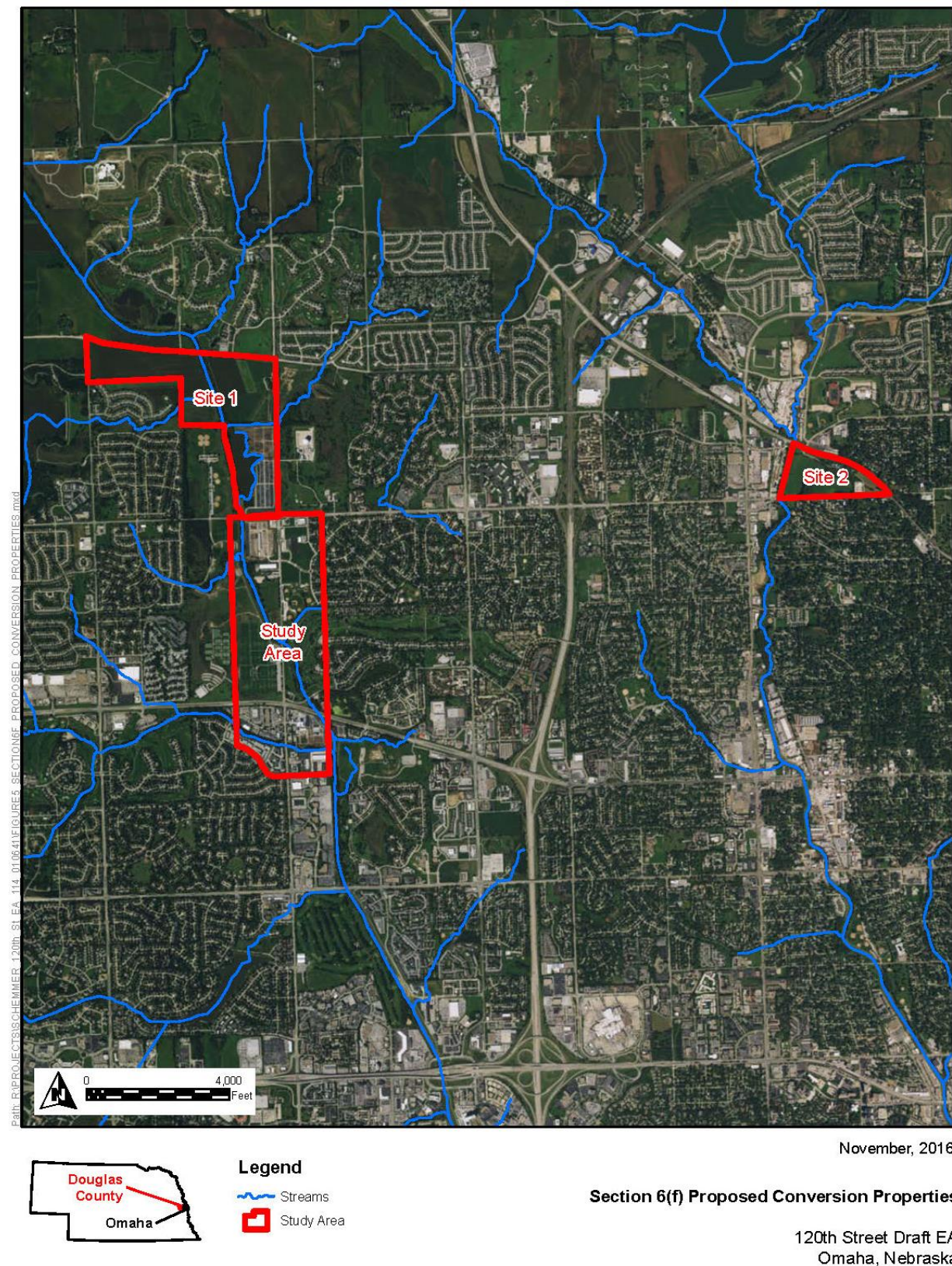


Figure 11. Section 6(f) Proposed Conversion Properties

The two sites are comparable when reviewed for the resources analyzed in the Section 6(f) Environmental Analysis. The primary differences between Site 1 and Site 2 involve Cultural Resources, Clean Water Act (wetlands and other waters of the U.S.), and Hazardous Wastes, and Farmlands. These differences are summarized as follows:

- Cultural Resources. Site 1 has no previously recorded cultural resources. Site 2 has one NRHP-listed, Military Road, adjacent to the property. This cultural resource would be avoided if Site 2 is selected for conversion.
- Clean Water Act. Reviewing the potential for jurisdictional waters and wetlands under the Clean Water Act, Site 1 has four potential features and Site 2 has one feature located along the western boundary.
- Hazardous Wastes. There are no hazardous waste sites in the vicinity of Site 1 that are still under EPA review. Site 2 has four hazardous waste sites located within 0.5 mile.
- Farmlands. A portion of Site 1 has farmlands. The Farmland Protection Policy Act (FPPA) does not include projects located on land within urban development (NRCS, 2012). Both Site 1 and Site 2 are located in areas zoned as Development Reserve District. This zone is designated as a transitional zone for the orderly conversion of land from agricultural and rural to urban uses. Therefore, the farmlands in Site 1 are not protected under the FPPA.

During the NEPA environmental review for the conversion locations, the NPS will evaluate site conditions in detail to determine final impacts to the environmental resources. Information regarding the type and location of construction activities (i.e., a Proposed Action) within these areas will not be known prior to completion of this FHWA EA. When the conversion property is identified, the Section 6(f) land conversion documentation and replacement property will be completed by the City of Omaha according to the Land and Water Conservation Fund Conversion of Use Regulations and Procedures Manual administered through the Nebraska Game and Parks Commission. Upon completion of the Section 6(f) conversion review, a re-evaluation of the Project's NEPA analysis by FHWA would be required.

On October 2, 2013, NDOR indicated that NPGC had reviewed the Section 6(f) evaluation and the Environmental Analysis and had no comments (see **Appendix E**). The Section 6(f) Environmental Analysis is available on request.

Mitigation

- Mitigation would be provided through the selection of one of the 6(f) conversion properties to replace the impacted Section 6(f) resource. Information regarding the type and location of construction activities (i.e., a Proposed Action) within these areas would not be known prior to completion of this EA. When the conversion property is identified, the Section 6(f) land conversion documentation and replacement property would be completed by the City of Omaha according to the Land and Water Conservation Fund Conversion of Use Regulations and Procedures Manual administered through the Nebraska Game and Parks Commission. This coordination would occur during the ROW stage of the project. (City of Omaha)
- If Site 2 is selected as the 6(f) conversion property through the Section 6(f) conversion process, the known cultural resource, Military Road, would not be impacted as part of the development of the site. (City of Omaha)
- The total acreage of the acquired property would be commensurate with the acreage required as part of the Section 6(f) conversion process. (City of Omaha)

- The location of the conversion property would occur within one of the two sites reviewed in the FHWA EA and would avoid impacts to social, environmental and economic resources. (City of Omaha)
- Upon completion of the Section 6(f) conversion review, a re-evaluation of the Project's NEPA analysis would be required. (City of Omaha)

Standard Specifications

- Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to Section 6(f) properties includes:
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

H. Noise

Summary

A noise study report (**Appendix D, Noise Analysis**) was prepared to assess the current and future noise levels in the Study Area. The noise study was reviewed and approved by NDOR on July 14th, 2015 (**Appendix D**).

Noise regulations have been developed to provide procedures for noise studies and abatement measures for informing the public and local officials for highway projects under Title 23 CFR Part 772. This policy and associated guidelines are used to evaluate impacts of transportation projects on noise sensitive receptors associated with projects. This Project was evaluated using the NDOR Noise Policy for highway transportation projects (NDOR, 2011a). The NDOR policy was written to conform to the federal policy and guidelines as stated in Title 23 CFR Part 772. NDOR's Noise Policy (FHWA, 2011) considers that a noise impact occurs and abatement measures shall be considered for receivers if:

1. The predicted design year noise levels approach or exceed the noise abatement criteria. NDOR has established that a noise level of one decibel (dBA) less than the noise abatement criteria in the FHWA Noise Standards constitutes "approaching" the NAC.
2. Predicted future noise levels are 15 dBA or more above existing levels. For purposes of interpreting the FHWA noise standards, this would be considered "substantially exceeding" existing levels.

The noise abatement criteria in **Table IV.2** below, developed by FHWA, describes activities and sound level thresholds to determine if any area is being impacted by noise. Noise abatement measures must be evaluated if an area is determined to be impacted.

Table IV.2. FHWA Noise Abatement Criteria

Activity Category	Activity Leq(h)	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, television studios.
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	-----	-----	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities, (water resources, water treatment, electrical), and warehousing.
G	-----	-----	Undeveloped lands

Notes: The approach criterion has been defined as one dBA less than the abatement criteria. For highway noise impact assessments, the sound level is expressed as an average hourly equivalent Leq (h) decibel that has been A-weighted.

Affected Environment

The Study Area is typical of an urban environment, with a variety of anthropogenic noise sources. Noise measurements were collected at 38 locations that were representative of the existing ambient conditions (**Table IV.3**). One of the 38 receptors (Receiver 14), at the Keystone Little League ball fields, is impacted by traffic noise under the existing conditions (67.4 dBA) that exceeds the noise criteria (66 dBA for Type C land uses).

Table IV.3. Existing Noise Levels along 120th Street

Receiver	Existing Noise Levels (Leq(h))	Noise Abatement Criteria (Leq(h))
Receiver 1 - Business	51.8	71
Receiver 2 - Business	55.2	71
Receiver 3 - Business	60.0	71
Receiver 4 - Undeveloped	60.2	71
Receiver 5 - Ball Park	53.5	66
Receiver 6 - Ball Park	61.8	66
Receiver 7 - Ball Park	51.4	66
Receiver 8 - Ball Park	53.5	66
Receiver 9 - Ball Park	59.8	66
Receiver 10 - Ball Park	53	66
Receiver 11 - Ball Park	54.7	66
Receiver 12 - Ball Park	49	66
Receiver 13 - Ball Park	58.2	66
Receiver 14 - Ball Park	67.4	66
Receiver 15 - Golf Course	59	66
Receiver 16 - Golf Course	59.6	66

Receiver	Existing Noise Levels (Leq(h))	Noise Abatement Criteria (Leq(h))
Receiver 17 - Golf Course	52.6	66
Receiver 18 - Golf Course	58.5	66
Receiver 19 - Golf Course	57	66
Receiver 20 - Golf Course	58.4	66
Receiver 21 - Soccer Field	57.5	66
Receiver 22 - Soccer Field	58.0	66
Receiver 23 - Business	64.5	71
Receiver 24 - Business	61.8	71
Receiver 25 - Business	64.3	71
Receiver 26 - Business	61.2	71
Receiver 27 - Business	62.7	71
Receiver 28 - Residential	59.3	66
Receiver 29 - Residential	59.6	66
Receiver 30 - Residential	59.9	66
Receiver 31 - Residential	60.1	66
Receiver 32 - Residential	63.3	66
Receiver 33 - Residential	63.5	66
Receiver 34 - Residential	63.6	66
Receiver 35 - Residential	63.6	66
Receiver 36 - Business	62.8	71
Receiver 37 - Business	62.8	71
Receiver 38 - Business	58.5	71

Note: The sound level is expressed as an average hourly equivalent Leq (h) decibel that has been A-weighted.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, one of the receptors at the Keystone Little League ball fields would continue to be impacted by noise. Additionally, noise levels would increase gradually over time due to increased traffic in the Study Area. Model results indicate that traffic noise levels for the No Build Alternative in 2038 would increase by no more than 2.2 dBA at any given receptor. Future noise levels would exceed the NAC for 1 receptor (14/14A) at the Keystone Little League Ballpark, but would not “substantially exceed” existing levels (less than 15 dBA). NDOR does not consider noise abatement for No Build Alternatives.

Preferred Alternative

Existing traffic patterns in the Study Area would be temporarily disrupted to a degree during the construction period. Some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. Temporarily elevated traffic noise levels could be associated with the higher traffic volumes on those routes during the construction period. Based on the discussion above for the No Build Alternative, the temporary increase in traffic on alternative routes is not expected to substantially exceed noise levels for receptors along those routes.

Under the Preferred Alternative, two of the 38 noise receptors in the Study Area (Receivers 6 and 14) would be impacted on a long-term basis by noise (**Table IV.4**). As a result, noise abatement measures were considered according to CFR Part 772. The NDOR Noise Abatement Policy (2011) was also used for guidance in evaluating the feasibility and reasonableness of individual noise barriers. The complete analysis is included in **Appendix D, Noise Analysis**, and is summarized below. In the Noise Analysis report, the “20’ Left Alignment” is the analysis of the Preferred Alternative.

Noise Barrier

Receiver 6, 6A and 14, 14A – Not feasible. Noise receptors 6, 6A and 14, 14A are located on a ball park's bleachers on the east side of 120th Street. Since the ballpark is considered Activity Category C, the entire ball park would need to be analyzed for abatement. To receive a 5dBA reduction, a barrier wall would extend 1,320 feet along the western side of the ball fields, with two breaks in the wall of approximately 70 feet in length for parking lot access. The height of the wall would be 30 feet, the maximum allowed per NDOR standard, to obtain a 5dBA reduction for 10 of the 20 front row receptors (50.0%). As this is less than the minimum 60 percent required of front row receptors to meet the reduction requirement for an Acoustic Feasibility Design Goal, the construction of the wall would not be considered feasible.

Earth Berms

Earth berms were evaluated for noise barriers but were not considered feasible due to the topography and the space restrictions between the roadway and the already undersized parking lots for the ball fields.

Buffer Zones

Buffer zones are typically used in undeveloped areas where a substantial amount of ROW could be obtained prior to development. Most of the land along 120th Street has been developed, making buffer zones not feasible.

Alteration of Horizontal and Vertical Alignments

Noise abatement measures that include the alteration of horizontal and/or vertical alignments could be incorporated to reduce traffic noise impacts where the receptors are typically on one side of the roadway or where the elevation can be adjusted. Moving the centerline away from the source may reduce the noise impacts enough to be in compliance. This was considered for 120th Street; however the existence of receptors on both sides of the street made this abatement measure impractical.

Table IV.4. Predicted Noise Levels

Receiver	Predicted Noise Levels (Leq(h))	Noise Abatement Criteria (Leq(h))	Increase Over Existing Levels (Leq(h))
Receiver 1 - Business	54.3	71	2.5
Receiver 2 - Business	57.4	71	2.2
Receiver 3 - Business	62.8	71	2.8
Receiver 4 - Undeveloped	63.5	71	3.3
Receiver 5 - Ball Park	56.8	66	3.3
Receiver 6 - Ball Park	66.5	66	4.7
Receiver 7 - Ball Park	54.8	66	3.4
Receiver 8 - Ball Park	56.8	66	3.3
Receiver 9 - Ball Park	63.6	66	3.8
Receiver 10 - Ball Park	54.7	66	1.7
Receiver 11 - Ball Park	54.9	66	0.2
Receiver 12 - Ball Park	51.5	66	2.5
Receiver 13 - Ball Park	60.6	66	2.4
Receiver 14 - Ball Park	69.2	66	1.8
Receiver 15 - Golf Course	61.2	66	2.5
Receiver 16 - Golf Course	62.1	66	3.4

Receiver	Predicted Noise Levels (Leq(h))	Noise Abatement Criteria (Leq(h))	Increase Over Existing Levels (Leq(h))
Receiver 17 - Golf Course	56	66	2.9
Receiver 18 - Golf Course	61.4	66	1.8
Receiver 19 - Golf Course	58.8	66	0.6
Receiver 20 - Golf Course	59	66	5.8
Receiver 21 - Soccer Field	63.3	66	4.8
Receiver 22 - Soccer Field	62.8	66	0.7
Receiver 23 - Business	65.2	71	0.5
Receiver 24 - Business	62.3	71	1.6
Receiver 25 - Business	65.9	71	0.4
Receiver 26 - Business	61.6	71	-0.2
Receiver 27 - Business	62.5	71	-0.2
Receiver 28 - Residential	59.1	66	-0.5
Receiver 29 - Residential	59.1	66	-1
Receiver 30 - Residential	58.9	66	-1
Receiver 31 - Residential	59.1	66	-0.3
Receiver 32 - Residential	63	66	0.2
Receiver 33 - Residential	63.7	66	0.2
Receiver 34 - Residential	63.8	66	0.5
Receiver 35 - Residential	64.1	66	-0.9
Receiver 36 - Business	61.9	71	-0.2
Receiver 37 - Business	62.6	71	0.8
Receiver 38 - Business	59.3	71	2.5

Note: The sound level is expressed as an average hourly equivalent Leq (h) decibel that has been A-weighted.

In addition to long-term traffic noise, the Preferred Alternative would also induce construction-related noise. The noise sensitive receptors immediately adjacent to 120th Street would be impacted by site clearing, excavation, earth movement, paving, and the installation of signage and traffic control devices. Although work would be done within the time constraints of applicable local municipal ordinances, if any work is required during nighttime periods, all required permits would be obtained from the local municipality. These permits are likely to include conditions and restrictions on specific activities during nighttime hours to reduce the impact of construction noise on adjoining properties.

Mitigation

Noise abatement measures were determined to be infeasible for the Project.

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to noise includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

I. Utilities

Summary

The City of Omaha has the authority and responsibility to regulate utility occupancy on all public roads and streets not designated as state highways, which includes the portion of 120th Street located within the Study Area.

Affected Environment

The following providers have utilities in the Study Area:

- Omaha Public Power District – overhead power lines
- Metropolitan Utilities District (MUD) – 18-inch, 125-pound gas line and regulator, and two 12-inch water main lines
- Century Link – underground duct line and two buried cables
- COX – fiber optic cable and ducts
- Northern Natural Gas – 16-inch high pressure gas line
- City of Omaha – 24-inch sanitary sewer main and manholes

Environmental Impacts

No Build Alternative

Under the No Build Alternative, the Project would not be constructed. There would be no change or impacts to the existing utilities within the Study Area.

Preferred Alternative

The Preferred Alternative would require relocation of some utilities within the Study Area. Utility companies are responsible for relocation costs associated with their facilities located within public ROW that would be impacted by the construction of the Project. All required utility adjustments would be coordinated through the City of Omaha and the Contractor as per NDOR's Standard Specifications. All utilities in the area have been notified of the Project. A redundant service would be provided so that customers do not experience the effect of being without service. This redundancy is provided in extra lines or bypassing the existing feeds prior to construction of the existing lines. Environmental impacts are not anticipated as a result of utility adjustments.

The utility owner is responsible cost and for obtaining any environmental permits and approvals required for utility relocation. Disruption of utility service is not anticipated as a result of utility adjustments. The adjustment for these utilities would take place prior to or in the appropriate phase of construction.

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve

the potential for relocation or disturbance of any utility facilities that may be present along those routes.

Mitigation

- The Contractor would follow NDOR's Policy for Accommodating Utilities on State Highway Right-of-Way (NDOR, 2001). The City of Omaha would be responsible for notifying utility companies of the need for relocation during the design stage of the Project. Agreements with the utility companies would be coordinated by the City of Omaha and NDOR prior to construction. The Contractor would be responsible for notifying utility companies of relocation needs during the construction phase of the Project for utilities that were not relocated prior to construction. A redundant service would be provided so that customers do not experience the effect of being without service. (City of Omaha, Contractor)
- The utility companies would be responsible for relocation costs. (Utility companies)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to utilities include:

- Standard Specification 105.06 – Control of Work – Cooperation with Utilities (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)
- Standard Specification 107.12 – Legal Relations and Responsibility to the Public – Responsibility for Damage, Injury, or Other Claims (NDOR, 2007)
- Standard Specification 107.16 – Legal Relations and Responsibility to the Public – Contractor's Responsibility for Utility Property and Services (NDOR, 2007)

J. Land Resources

Summary

The evaluation of land resources includes topography, soils, geology and mineral resources, and agriculture.

Affected Environment

Topography throughout the Study Area contains nearly level floodplains located within moderate to steeply sloping hill land. Much of the natural variations in topography have been evened out through urbanization and substantial re-grading. The elevation of the Study Area ranges from 1,022 to 1,152 feet above sea level.

The soils in the Study Area are generally deep, well drained silt loam to silty clay loam formed in loess. Permeability is moderate and the available water capacity is high (PBS&J, 2010). The soils types found in the Study Area are included in **Table IV.5**.

The Project occurs in the loess-mantled hills of eastern Nebraska within the Dissected Till Plains section, a part of the Central Lowlands province of the Interior Plains physiographic division. The geology of the area includes artificial fill beneath commercial structures and the existing 120th

Street. Existing hills and ridges are covered by Peoria loess as the most recent geologic deposit. Loveland loess generally exists below the Peoria loess, and glacial till deposits are usually found below the loessial soils. The glacial and loessial soils that existed within the drainage features have been partially or completely removed and replaced with colluvium, alluvium, and formation deposits. Bedrock generally consists of sandstone, shale, and limestone of the Pennsylvania Age. Weathered bedrock was found at depths ranging from 54 to 95 feet in the Study Area (Schemmer, 2010).

Table IV.5. Soil Types in the Study Area

Soil Type	Acres
Kennebec silt loam, occasionally flooded	87.12
Urban land-Udortents complex, drainageway, 0 to 8 percent slopes, occasionally flooded	285.34
Judson silty clay loam, 2 to 6 percent slopes	14.41
Contrary-Monona-Ida complex, 6 to 17 percent slopes	1.40
Contrary-Marshall silty clay loams, 6 to 11 percent slopes	6.36
Contrary-Monona-Ida complex, 6 to 17 percent slopes	2.89
Udarents-Urban land complex, 1 to 14 percent slopes	15.06
Udarents-Urban land complex, footslope, 0 to 10 percent slopes	7.46
Udarents-Urban land complex, 1 to 14 percent slopes	0.14
Udarents-Urban land complex, footslope, 0 to 10 percent slopes	3.34

Exploration or development of mineral resources has not occurred in the vicinity of the Project. There are no agricultural lands, such as row crops or pastures, within the Study Area.

Environmental Impacts

No Build Alternative

The No Build Alternative would not affect topography, soils, geologic and mineral resources, or agriculture in the Study Area.

Preferred Alternative

The Preferred Alternative would not affect the topography, or geologic and mineral resources of the Study Area. Additionally, there would be no impacts to agricultural lands, as none occur in the Study Area. As described in the Geotechnical Report prepared for the Project (Schemmer, 2010), much of the Project north of West Maple Road would be raised above the existing grade. As much as 18 feet of fill would be required in some locations. However, nearly all of the fill materials would be obtained from off-site borrow sources. Soil cuts would be limited and would consist of either topsoil or pavement materials. The topsoil would be excavated to a depth of six inches and stockpiled for later use covering the finished grades and vegetated slopes.

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during

the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for altering the topography or disturbing any geologic or mineral resources that may be present along those routes.

Mitigation

- Nearly all of the fill materials would be obtained from off-site borrow sources. Soil cuts would be limited and would consist of either topsoil or pavement materials. The topsoil would be excavated to a depth of six inches and stockpiled for later use covering the finished grades and vegetated slopes. No additional mitigation related to topography, soils, geologic and mineral resources, or agriculture is proposed or required. (City of Omaha)

K. Drainage and Floodplain Considerations

Summary

A floodplain is defined by FEMA as the area adjacent to a watercourse that is inundated by a flood event. Executive Order 11988, Floodplain Management (42 FR 26951), requires that Federal agencies, 1) identify potential floodplain encroachment on projects they fund and, 2) assess the impact of this encroachment on human health, safety, and welfare and on the natural and beneficial values of the floodplain.

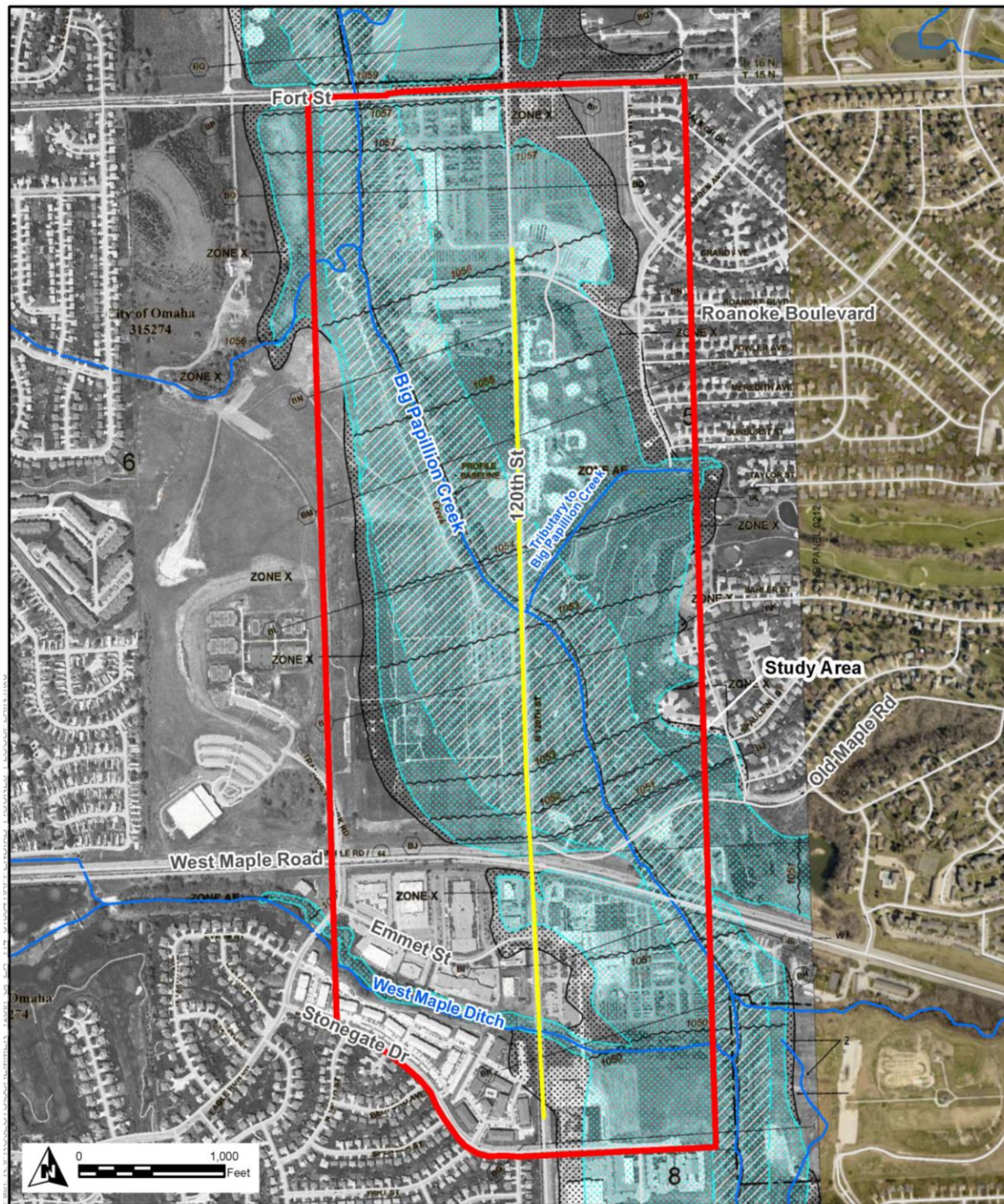
A floodplain that is inundated by a 100-year flood event is termed a 100-year floodplain. A floodway is the channel and any adjacent floodplain areas that must be kept free of encroachment so that the 100-year (1 percent chance of being equaled or exceeded in any single year) flood can be conveyed without increasing the flood elevation by more than one foot.

Floodways are developed through cooperative agreements between FEMA, the responsible State agency for floodplain enforcement (NDOR), and the responsible local agencies (City of Omaha and Papio-Missouri River Natural Resources District). Construction within a floodway is required to achieve a “no-rise” condition (no increase to the base 100-year flood elevation). Construction or development proposed within a floodway requires analysis and subsequent No-Rise certification by a qualified engineer in addition to any other local and state requirements.

The area of the floodplain that lies between the floodway limits and that of the floodplain is termed the floodplain fringe. Construction or development within the floodplain fringe cannot cause the 100-year flood event to raise more than one foot at any location. If construction or development violates either of these limits (floodway “no-rise” or floodplain fringe one-foot rise), then a variance from FEMA, and State and local agencies, must be acquired.

Affected Environment

The Project area occurs partially within the 100-year floodplain of Big Papillion Creek (**Figure 12**), which flows in a southerly to southeasterly direction in this location. Big Papillion Creek drains a relatively large basin (132 square miles), and the majority of the water in the basin is used for agricultural purposes. However, within the Study Area, some commercial development has occurred within the floodplain. The Study Area includes a FEMA mapped and regulated floodway. **Figure 12** identifies the floodway, the 100-year floodplain, and the 500-year floodplain (Flood Zone X).



Legend

- Preferred Alternative Centerline
- Streets
- Streams
- Study Area

- 100-year Floodplain*
- Floodway*
- Flood Zone X*

*Source: FEMA Flood Insurance Rate Map (FIRM), Map No. 31055C0211H, Effective December 2, 2005.

April 2017

Floodplain

120th Street Draft EA
 Omaha, Nebraska

Figure 12. Floodplain

Environmental Impacts

No Build Alternative

Under the No Build Alternative, 120th Street would remain partially within the floodplain of Big Papillion Creek. The existing bridge over Big Papillion Creek would not be modified.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for altering the drainage patterns or floodplain conditions in the vicinity of the alternate routes.

A FEMA-approved corrected effective hydraulic model was used to assess vertical profiles for the 120th Street corridor north of West Maple Road within the Big Papillion Creek floodplain. The profiles investigated ranged from keeping the vertical profile near as-built conditions to providing 100-year future hydrology protection for the new 120th Street roadway (future hydrology refers to the fully developed Big Papillion Creek watershed).

Under the existing conditions, 120th Street overtops in the event of an approximate 5-year storm event (using future hydrology) south of the existing Big Papillion Creek Bridge. Several alternatives were explored to prevent overtopping of the roadway. Examples of the alternatives include: lengthened bridge spans, floodplain relief structures, overtopping 120th Street scenarios, and Big Papillion Creek channel benching to improve hydraulics through 120th Street. After investigation of these alternatives, the Preferred Alternative was set to keep the vertical profile above the current 30-year storm. The current 30-year storm is roughly equivalent to the future 10-year storm.

The Papio-Missouri River Natural Resources District (the responsible FEMA Cooperating Technical Partner for acceptance of floodplain permits in Omaha) and the City of Omaha Design Criteria Manual require use of future conditions for design. The proposed design roadway did not comply with the design standard identified as the “50-year future flood”. However, the proposed design did meet the criteria for a 30-year current event (10-year future event) using a 290-foot long bridge and channel benching of Big Papillion Creek. The Papio-Missouri River Natural Resources District waived the standard design criteria and accepted the proposed design. Subsequently, a No-Rise Certificate (documentation of the engineering analysis) was provided and accepted. During analysis it was determined that an increase in upstream water surface elevations above existing conditions should be avoided for all storm events to minimize impacts to adjacent properties. As such, revised benching and a slightly modified profile were proposed for 120th Street to eliminate the water surface elevation increases. The updated hydraulic analysis was approved by the NDOR (**Appendix I, Hydraulic Analysis**) and will be accepted by the Papio-Missouri River Natural Resources District as the 100-year future “no-rise” condition is still achieved.

A hydraulic analysis of the existing and proposed widened bridge over the West Maple Creek/Ditch (south of West Maple Road) was conducted to ensure the existing bridge was suitable for widening. The results of the hydraulic study indicated that both the existing and

proposed bridge maintained more than one foot of freeboard above the 100-year event. When a local 100-year event was analyzed with the concurrent regional 100-year event on the Big Papillion Creek, greater than one foot of freeboard is provided at the existing and proposed widened structure. Also, whether or not concurrent events are considered, the proposed widening creates less than one foot rise from existing conditions, which is the maximum allowed for a structure in the floodplain. The hydraulic analysis for the widened bridge over West Maple Creek was reviewed and approved by the NDOR.

Local drainage would be maintained in an urban closed storm sewer system under the Preferred Alternative. Pavement drainage along 120th Street would be provided in accordance with the Omaha Regional Storm Design Manual by use of curb inlets meeting a 10-year storm with one lane spread design criteria. West Maple Road would meet NDOR urban high speed drainage standards with no ponding allowed on driving lanes (spread would be maintained in 4 feet shoulder at intersection). Six locally larger drainage areas (< 10 acres) contribute to and are passed under or parallel to 120th Street. These drainage areas would be collected in the urban storm sewer system and outlet into Big Papillion Creek and West Maple Creek primarily as they currently exist. Outlet treatment to reduce velocity and protect stream banks would be incorporated at all point-source drainage outlets.

Mitigation

- Re-analysis of the benching and roadway profile for 120th Street would occur if upstream water surface elevations change as compared to existing water surface conditions. (City of Omaha)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to drainages and floodplains include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

L. Groundwater

Summary

Nebraska Administrative Code (NAC) Title 118, Groundwater Quality Standards and Use Classification, govern the use of groundwater in Nebraska and sets standards for protection of groundwater. NAC Titles 196 and 456 provide for protection of groundwater quality to prevent contamination in designated areas.

Affected Environment

The subsurface soil and groundwater conditions were investigated through drilling borings at various locations within the Study Area. In general, the soils are classified as clay and silty clay material. Sand alluvium deposits were found at deeper depths. Groundwater levels were observed at levels ranging from 7.5 feet to 31 feet.

There are no known wells located within the Study Area. Municipal water is obtained from the MUD, which obtains the water either directly from the Missouri River sufficiently upstream from

the Big Papillion Creek tributary connection or from groundwater wells along the Platte River, also located sufficiently upstream from the Big Papillion Creek tributary connection.

Environmental Impacts

No Build Alternative

There would be no effects to groundwater under the No Build Alternative.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for altering the groundwater conditions in the vicinity of the alternate routes.

The Big Papillion Creek is a gaining stream within the Study Area, based on groundwater levels identified in borings and the ordinary high water identified in Project wetland surveys. A gaining stream is a stream where the water table is equivalent with the surface water. The Preferred Alternative would include increased conveyance of water through the new bridge opening by excavating benches along both banks of Big Papillion Creek. These benches would slope toward the creek, and the creek bank elevation would be set above the ordinary high water. As such, the construction and post-construction conditions would not cause a reduction (through lowering of the channel bottom or increasing the permeability of the bank) or rise (through raising the channel bottom or sealing of the banks) in groundwater levels.

Floodplain groundwater levels or quality would not be affected by the Preferred Alternative. As noted in **Section IV.K** (Drainage and Floodplain), the Project would not cause a change to flood flows at or greater than the 100-year flood event.

Mitigation

No mitigation related to groundwater is proposed or required.

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to groundwater include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

M. The Clean Water Act (Sections 401, 402, and 404) (Wetland Impacts)

Summary

Waters of the U.S. are regulated by the EPA and United States Army Corps of Engineers (USACE) under Sections 401 and 404 of the Clean Water Act (CWA). Resources regulated under Sections 401 and 404 include wetland areas, natural ponds, impoundments, and waterways such as rivers and streams. The Omaha District of the USACE has jurisdiction over waters of the U.S. located within the City of Omaha, including the Study Area. These regulations require a USACE-issued permit to authorize the discharge of dredged or fill material into waters of the U.S. for projects in which permanent impacts to wetlands total more than 0.1 acre. The USACE regulates certain transportation projects under the Nationwide Permit (NWP) 14 - Linear Transportation Projects. NWP 14, as defined by USACE, covers activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the U.S. Under NWP 14, permanent impacts to waters of the U.S. are not allowed to exceed 0.5 acre. Temporary impacts to wetlands occurring during construction are generally not counted towards regulatory thresholds so long as the temporarily impacted areas are returned to their original condition upon completion.

Wetlands are also protected under EO 11990, Protection of Wetlands, which requires federal agencies to implement "no net loss" measures for wetlands. The no net loss policy requires entities to first avoid wetland impacts when possible, make every effort to minimize impacts if wetlands cannot be avoided, and finally mitigate for all impacts resulting from a given project.

The State of Nebraska also has regulatory jurisdiction over all waters within its boundaries. NDEQ is responsible for administering the CWA Section 401 Water Quality Certification process for any project requiring a Federal permit that would result in impacts to waters of the U.S., a process by which NDEQ verifies that the project will not result in violations of State water quality standards. NDEQ is also responsible for administering regulations found in NAC Title 117, which establishes additional state-level jurisdiction over all waters within its borders identified as waters of the State.

Under Section 402 of the CWA and EPA regulations published in 40 CFR 122, it is unlawful to discharge any pollutant from a point source into Waters of the US, unless a permit is obtained. A National Pollutant Discharge Elimination System (NPDES) stormwater permit would be required for the Project. There are three main types of NPDES stormwater permit categories: Construction, Industrial, and Municipal Separate Sewer System (MS4). A Construction Stormwater Permit would be required by the State for this Project. A requirement for a Construction Stormwater Permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is an ongoing document that requires updating throughout a project's construction activities. The City of Omaha maintains an active MS4 Post Construction program to manage the discharges through the stormwater system. Linear projects (such as road projects) need to comply with the MS4 program (personal communication, N. Cudahy, City of Omaha, Environmental Quality Control Manager, July 31, 2015). Therefore, Project plans for long-term stormwater management would need to be evaluated for compliance with MS4 program requirements.

Affected Environment

Tetra Tech, Inc. (Tetra Tech) was contracted by the Schemmer Associates (Schemmer) to perform wetland delineations of all waters of the U.S. within the LOC for the Project. Following initial consultations with the USACE Omaha District, delineations were performed in the summer of 2011 in accordance with the 1987 Corps of Engineers Wetland Delineation Manual and the

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. Tetra Tech's findings were submitted to Schemmer in its December 2011 report entitled "120th Street Reconstruction Project Wetland Determination Report." Schemmer submitted this report to USACE Omaha District for review in August 2012. Tetra Tech prepared an errata sheet following the submittal of this report, correcting potential wetland acreages, based on a subsequent site meeting on May 1, 2013, and coordination with USACE and Schemmer. While the USACE provided a verbal concurrence of Wetland Determination Report with Errata Sheet, the USACE prefers to issue a jurisdictional determination after the submittal of a completed permit application. The Tetra Tech wetland determination report is available on request.

Jurisdictional resources identified in the Study Area include the areas at and below ordinary high water marks (OHWM) within the Big Papillion Creek and the West Maple Creek/Ditch riverine systems, emergent wetland areas immediately adjacent to these waterways, and wetland areas in roadside ditches along the 120th Street corridor (Tetra Tech, 2011).

Big Papillion Creek traverses 120th Street near the center of the Study Area approximately 0.3 mile north of West Maple Road, continues southeast and south through the golf course in the eastern portion of the Study Area, and traverses West Maple Road approximately 0.2 mile east of 120th Street. Big Papillion Creek originates in Washington County and flows southeast through Douglas and Sarpy counties until its confluence with the Missouri River approximately 2 miles south of Bellevue, Nebraska. West Maple Ditch, a tributary to Big Papillion Creek, traverses 120th Street in the southern portion of the Study Area between Emmet Street and Stonegate Drive. It originates approximately 2 miles west of the Study Area and flows east along West Maple Road. West Maple Ditch continues east through the Study Area to its outfall point into Big Papillion Creek approximately 0.3 mile east of 120th Street outside of the Study Area. Both systems contain significantly incised banks that appear to have been subject to historic disturbances, including previous attempts at bank stabilization via grading and placement of riprap materials. Delineated portions of each basin include all areas at or below OHWMs and additional low-lying areas at the bases of the banks immediately adjacent to the channels located within the LOC boundaries. The locations and extents of jurisdictional wetland and waters of the U.S. within these basins are shown in **Figure 13**.

Storm water in portions of the Study Area north of West Maple Road generally flows into Big Papillion Creek via roadside drainage ditches and/or culverts located along the 120th Street corridor. Storm water south of West Maple Road generally flows into West Maple Ditch via roadside drainage ditches, storm drains, and/or culverts located along the 120th Street corridor. Two of the drainage ditches within the Study Area were found to contain hydrophytic vegetation and depressions subject to sustained inundation sufficient to be considered jurisdictional under the CWA. One jurisdictional wetland area is located in a narrow drainage ditch east of 120th Street between the road and the Keystone Little League parking lot. This ditch corresponds to Sample Point #2 in the wetland delineation report and drains south into a tributary to Big Papillion Creek immediately east of the eastern LOC. The second wetland area is located in a depression south of West Maple Road and directly west of 120th Street. This ditch drains east into a storm drain on the southwest corner of 120th Street and West Maple Road. Additional drainage ditches and culvert systems presumed to drain into Big Papillion Creek and West Maple Ditch were observed throughout the Study Area; however, these areas displayed no discernible qualities consistent with jurisdictional wetlands. The locations and extents of wetlands and waters of the U.S. within the Study Area are shown in **Figure 13**.

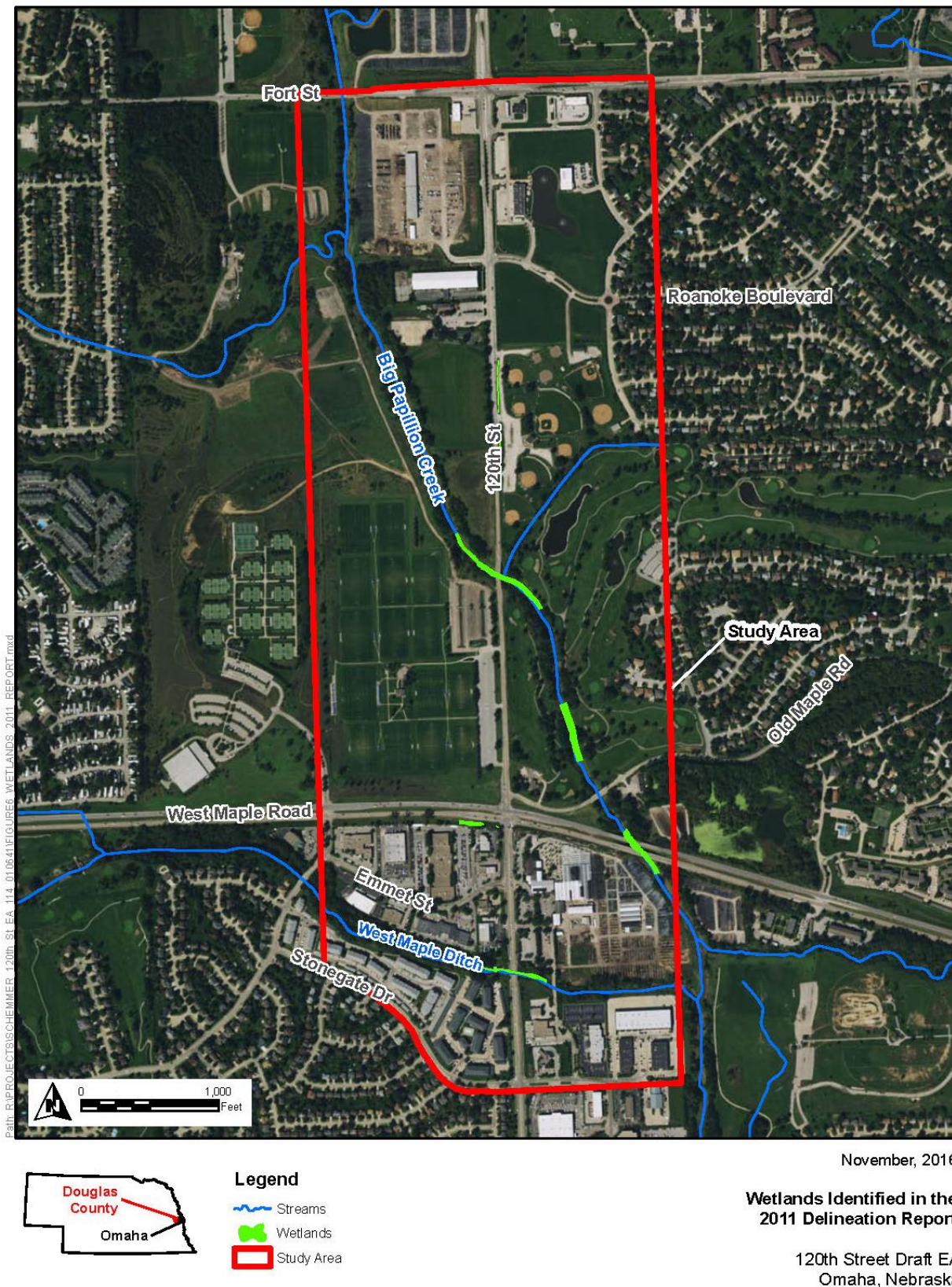


Figure 13. Wetlands Identified in the 2011 Delineation Report

Environmental Impacts

No Build Alternative

No temporary or permanent impacts to waters of the U.S. are anticipated under the No Build Alternative, as no construction would take place.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for altering the surface water or wetland conditions in the vicinity of the alternate routes.

The components listed in Table IV.6 of the Preferred Alternative would result in permanent impacts to wetlands and waters of the U.S. within the Study Area.

Table IV.6. Permanent Effects on Wetlands and Waters of the U.S.

Location	Description	Acres Impacted	Wetland Type
Wetlands			
Keystone Little League	Widening of 120 th Street north of Big Papillion Creek would result in elimination of wetlands within the drainage ditch between 120 th Street and the Keystone Little League parking lot	0.06	PEMA ¹
Southwest corner of 120 th and West Maple Road	Widening of 120 th Street between Emmet Street and West Maple Road would result in elimination of the eastern portion of a wetland within the drainage ditch near the southwest corner of 120 th Street and West Maple Road	0.01	PEMA/C ²
Southwest corner of 120 th and West Maple Road	Installation of a culvert	0.01	PEMA/C
Big Papillion Creek west of the 120 th Street bridge northwest and southwest sides of creek	Installation of two culvert outlets	0.02	PEMA
Big Papillion Creek west of 120 th Street Bridge	Installation of one culvert	0.01	PEMA
The east bank of Big Papillion Creek within The Knolls Golf Course	Installation of one culvert outlet	0.01	PEMC ³

Location	Description	Acres Impacted	Wetland Type
West bank of Big Papillion Creek, south of West Maple bridge	Modifications to one culvert outlet	0.01	PEMC
West side of 120 th Street across from Roadside Ditch 2*	Modifications to the culvert	0.01	PEMA
South end of Roadside Ditch 2*	Modifications to the culvert	0.06	PEMA
TOTAL		0.20	
Waters of the U.S.			
Big Papillion Creek west of the 120th Street bridge northwest and southwest sides of creek	Installation of two culvert outlets	0.08	-
Northeast of 120th and Big Papillion Creek	Installation of one culvert outlet	0.04	-
East bank of Big Papillion Creek within The Knolls Golf Course	Installation of one culvert	0.04	-
West bank of Big Papillion Creek, south of West Maple bridge	Modifications to one culvert outlet	0.02	-
West of 120th in West Maple Ditch	Modifications to one culvert outlet	0.02	-
East of 120th in West Maple Ditch	Installation of one culvert outlet	0.02	-
TOTAL		0.22	

*Estimates

¹PEMA – Palustrine, emergent, temporarily flooded. PEMA wetlands are nontidal wetlands that have surface water for brief periods during the growing season. These wetlands have erect, rooted vegetation present for most of the growing season.

²PEMA/C – Palustrine, emergent, temporarily or seasonally flooded. PEMA/C wetlands are nontidal wetlands that have surface water present between brief periods and extended periods of time during the growing season. These wetlands have erect, rooted vegetation present for most of the growing season.

³PEMC – Palustrine, emergent, seasonally flooded. PEMC wetlands are nontidal wetlands that have surface water present for extended periods of time during the growing season. These wetlands have erect, rooted vegetation present for most of the growing season.

Based on conservative estimates, the Preferred Alternative would result in impacts to waters of the U.S. totaling 0.22 acre and 0.20 acre of wetlands. The actual total area of impacted waters of the U.S. would likely be less, as approximately 0.3 acre of impacts would occur in open water and may not be considered permanent impacts by the USACE. This total indicates the Project's impacts would be below the 0.5 acre limit required for use of NWP 14.

The Preferred Alternative would also include removal and reconstruction of the 120th Street Bridge over Big Papillion Creek and widening of the existing 120th Street bridge over West Maple Ditch. Similar to the existing structures, impoundments supporting both bridges would remain above the OHWMs and emergent wetland boundaries in each basin, so no permanent impacts to the waters of the U.S. would occur. Installation of a temporary coffer dam may be needed in the event of

relatively high flow within the Big Papillion Creek basin at the time the new bridge is constructed; however, any impacts to waters of the U.S. incurred during use of the coffer dam would be temporary in nature and mitigated upon completion of construction activities. Therefore, any impacts resulting from construction near these areas are not included in impact totals.

Excavation and grading activities associated with the Preferred Alternative may lead to temporary impacts to surface water quality due to the increased likelihood for sediments to reach Big Papillion Creek and West Maple Ditch. Water quality impacts caused by fugitive sediments would be minor and temporary as construction in and around these basins would include bank stabilization measures such as riprap placement and re-vegetation.

Mitigation

- The City of Omaha would apply for and obtain a Section 404 NWP for these impacts during final design. (City of Omaha)
- The Contractor would adhere to the conditions of the Section 404 permit. (Contractor)
- Areas subject to temporary impacts would be returned to pre-construction elevations. (Contractor)
- Best management practices (BMPs) for construction would be implemented, and the general and special conditions required under the NWP would be followed. (City of Omaha, Contractor)
- In accordance with EO 11990, detailed mitigation commitments to compensate for permanently-impacted wetlands would be developed during the NWP application process. (City of Omaha)
- Impacts resulting from project site runoff (pollutants, erosion and sediment control) and activities would be minimized by implementation and maintenance of BMPs, required by the SWPPP, under the NPDES Construction Stormwater permit. (City of Omaha)
- Requirements of the City of Omaha grading permit for the Project would also be followed to minimize offsite impacts. (City of Omaha, Contractor)
- Bank stabilization measures including riprap placement and re-vegetation would prevent post-construction impacts. (City of Omaha, Contractor)
- A project specific SWPPP would be developed prior to construction activities by the City of Omaha in accordance with NDEQ, NPDES, and Construction Stormwater Notice of Intent (CSW-NOI) permit. (City of Omaha)
- Project plans for long-term stormwater management would need to be evaluated for compliance with City of Omaha MS4 program requirements. This review could result in the identification of additional best management practices for stormwater discharge that would be needed. (City of Omaha)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to groundwater include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

Special Provisions

- Special Provision – Temporary Water Pollution Control (B-3-0509)
 - Establishes the required documentation included in the Environmental Commitment Document and Project Erosion and Sediment Control Inspection
- Special Provision – Storm Water Pollution Prevention Plan (A-20-0307)
 - Requires the Contractor to understand the terms and conditions of the NPDES Construction Stormwater General Permit
- Special Provision – Storm Water Discharges (A-43-0408)
 - Requirements associated with storm water discharges from construction sites to Waters of the State of Nebraska

N. Impaired/Unique Waters

Summary

Under Section 303 (d) of the CWA, states are required to prepare a list of impaired surface water bodies on or within their borders every two years. The list of impaired waters is prepared by the NDEQ Water Quality Division and presented as part of its biennial Water Quality Integrated Reports in accordance CWA Section 305(b). NDEQ is required to establish Total Maximum Daily Loads (TMDLs) for pollutants found to cause impairments, and use the TMDLs as the basis for pollution control goals and strategies necessary to prevent further impacts and remedy existing impairments (NDEQ, 2012a).

Water Quality Integrated Reports describe existing water quality conditions for all major waters of the state and describe the extent to which designated uses are impacted by impairments. Water bodies identified as impaired waters do not support one or more of their assigned beneficial uses as defined in NAC Title 117 – Nebraska Surface Water Quality Standards. The reports identify five categories of waters, with Category 1 assigned to waters in which all designated use goals are met, and Category 5 assigned to waters unable to achieve one or more designated uses due to the presence of one or more pollutants. Beneficial use categories listed in NAC Title 117 are Primary Contact Recreation, Aquatic Life (divided into subcategories Coldwater A, Coldwater B, Warmwater A, and Warmwater B), Water Supply (divided into subcategories Public Drinking Water, Agriculture, and Industrial), and Aesthetics (NDEQ, 2012a).

Affected Environment

The beneficial uses assigned to Big Papillion Creek are Primary Contact Recreation, Aquatic Life (Warmwater Class A), Water Supply (Agriculture), and Aesthetics, as defined in NAC Title 117 (NDEQ, 2012a). The Primary Contact Recreation use designation is assigned to surface waters which are used, or have a high potential to be used, for recreational activities such as swimming, waterskiing, canoeing, and similar activities where the body may come into prolonged or intimate contact with the water. The Aquatic Life – Warmwater Class A use designation is assigned to waters that provide, or could provide, a habitat suitable for maintaining one or more identified key species on a year-round basis. These waters also are capable of maintaining year-round populations of a variety of other warm water fish and associated vertebrate and invertebrate organisms and plants. Agricultural Water Supply use designation implies that these waters can

be used for general agricultural purposes (e.g., irrigation and livestock watering) without treatment. The Aesthetics designation applies to all surface waters of the State. Aesthetically acceptable water bodies and wetlands are described in NAC Title 117 as free from human-induced pollution that causes noxious odors; floating, suspended, colloidal, or settleable materials that produce objectionable films, colors, turbidity, or deposits; and the occurrence of undesirable or nuisance aquatic life.

According to the most recent Water Quality Integrated Report released by NDEQ in April 2012, the Primary Contact Recreation use of Big Papillion Creek, identified in the report as water body MT1-10120, is impaired due to the presence of elevated E. coli bacteria levels. The creek has been designated as Category 4a water body, meaning the most recent water body assessment performed for the creek indicates that it is impaired by E. coli, and that NDEQ has established a TMDL for E. coli for the creek (NDEQ, 2012a). Sources of elevated E. coli levels, which typically include animal waste from livestock operations and/or human waste from septic systems and municipal sewer systems are not discussed in the report. No other impairments or pollutants associated with Big Papillion Creek are identified in the report.

West Maple Ditch is not included in the list of impaired waters and is therefore not considered impaired for the purpose of this DEA.

Environmental Impacts

No Build Alternative

No temporary or permanent impacts to impaired waters, positive or negative, are anticipated under the No Build Alternative, as no construction would take place. No potential sources of E. coli such as septic system drain fields, agricultural/livestock properties, or known municipal sewer system outfalls were identified within the Study Area; therefore, the No Build Alternative would most likely not increase or decrease concentrations of E. coli or any other potential pollutant within Big Papillion Creek.

Preferred Alternative

No temporary or permanent impacts to impaired waters, positive or negative, are anticipated under the Preferred Alternative. Construction plans do not include modifications to potential sources of E. coli such as septic system drain fields, agricultural/livestock properties, or known municipal sewer system outfalls; therefore, the Preferred Alternative would most likely not increase or decrease concentrations of E. coli within Big Papillion Creek. However, under the Preferred Alternative there exists the potential for further impairment of waters within the Study Area caused by migration of storm water containing other pollutants such as sediment, building materials, petroleum products used in construction machinery, and other waste materials into the waterways.

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for altering the surface water or groundwater conditions, and thereby the conditions of any impaired or unique waters, in the vicinity of the alternate routes.

Mitigation

- Impacts resulting from project site runoff (pollutants, erosion and sediment control) and activities would be minimized by implementation and maintenance of BMPs, required by the SWPPP, under the NPDES Construction Stormwater permit. Requirements of the City of Omaha grading permit would also be followed to minimize offsite impacts. Bank stabilization measures including riprap placement and re-vegetation would prevent post-construction impacts. (City of Omaha)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to impaired/unique waters include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

Special Provisions

- Special Provision – Temporary Water Pollution Control (B-3-0509)
 - Establishes the required documentation included in the Environmental Commitment Document and Project Erosion and Sediment Control Inspection
- Special Provision – Storm Water Pollution Prevention Plan (A-20-0307)
 - Requires the Contractor to understand the terms and conditions of the NPDES Construction Stormwater General Permit
- Special Provision – Storm Water Discharges (A-43-0408)
 - Requirements associated with storm water discharges from construction sites to Waters of the State of Nebraska

O. Vegetation

Summary

The Study Area is located in an urban to rural developed setting with the majority of vegetation being noxious or nonnative species. Noxious weeds are invasive species that are tracked due to their ability, once introduced, to out-compete the existing vegetation. Noxious weeds are regulated in Nebraska under the following regulations and guidelines (Nebraska Department of Agriculture, undated):

- Executive Order 13112
- 64 FR 6183 – Invasive Species
- Nebraska Noxious Weed Control Act
- Nebraska Department of Agriculture's Nebraska Noxious Weeds Regulations

Noxious weeds identified by the Nebraska Weed Control Association (NWCA) include the following noxious weed species (NWCA, 2012a):

- Saltcedar (*Tamarix ramosissima* & *Tamarix parviflora*)

- Purple Loosestrife (*Lythrum salicaria*)
- Phragmites (*Phragmites australis*)
- Leafy Spurge (*Euphorbia esula*)
- Canada Thistle (*Cirsium arvense*)
- Musk Thistle (*Cardus nutans*)
- Plumless Thistle (*Carduus acanthoides*)
- Spotted Knapweed (*Centaurea maculosa*)
- Diffuse Knapweed (*Centaurea diffusa*)
- Japanese Knotweed (*Fallopia japonica*)

In addition to the Noxious Weed list, the NWCA has developed a list of potentially invasive species that may impact Nebraska's ecosystems or economy (NWCA, 2012b):

- Amur Honeysuckle (*Lonicera maackii*)
- Caucasian Bluestem (*Bothriochloa bladhii*)
- Crown Vetch (*Coronilla varia*)
- Dames Rocket (*Hesperis matronalis*)
- Garlic Mustard (*Allaria petiolata*)
- Houndstongue (*Cynoglossum officinale*)
- Multiflower Rose (*Rosa multiflora*)
- Sericea Lespedeza (*Lespedeza cuneata*)
- St. John's Wort (*Hypericum perforatum*)
- Dalmatian Toadflax (*Linaria dalmatica*)
- Whitetop (*Cardaria* spp – three species)
- Russian Olive (*Elaeagnus angustifolia*)
- Autumn Olive (*Elaeagnus umbellata*)
- Perennial Pepperweed (*Lepidium latifolium*)
- European Buckthorn (*Rhamnus cathartica* and *Rhamnus davurica*)

The NWCA's Weed Mapper database was queried for existing noxious weed or potentially invasive species in Douglas County (NWCA, 2012c). No noxious weeds were identified within the Study Area.

Affected Environment

The Study Area is primarily mixed-use consisting of commercial and residential properties, public parks, a golf course, native deciduous woodlands, roadside vegetation, woodland, shrubland, and herbaceous riparian areas. The native woodlands are predominantly associated with the margins of Big Papillion Creek and West Maple Ditch and consist of woodland and emergent herbaceous species. Big Papillion Creek contains the only continuous intact native habitat within the Study

Area. **Section IV.M** (The Clean Water Act [Sections 401, 402, and 404] [Wetland Impacts]) describes the spatial extent and character of this habitat within the Study Area.

Historical upland vegetation consisted of tall grass prairie and deciduous shrubland. Only minor remnants of historical upland vegetation are likely to exist and would not spatially warrant consideration as a demonstrable vegetation community or would likely function as suitable upland wildlife habitat.

The Study Area's commercial, residential, public park and golf course properties contain isolated elements of natural landscaping mostly consisting of native and non-native deciduous trees and shrubs and landscaped lawns. Managed roadside vegetation within the Study Area is composed of a variety of native and non-native, annual and perennial grasses and forbs.

The City of Omaha has no record of noxious weed or potentially noxious weeds in the Study Area. Mowing is conducted twice a year to control and avoid any infestations.

Environmental Impacts

No Build Alternative

Under the No Build Alternative no additional disturbance or improvement to the Project vegetation would occur.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for removal or disturbance of vegetation resources that may be present along those routes.

Under the Preferred Alternative, construction would require the removal of trees, and grubbing and clearing on both sides of 120th Street. Ornamental trees used in landscaping would be removed. Clearing and grubbing the existing vegetation would occur within the temporary construction area boundaries. Impacts to wetland vegetation are described in **Section IV.M** (The Clean Water Act [Sections 401, 402, and 404] [Wetland Impacts]).

The Green Streets Plan for the City of Omaha includes retro-fitting existing roads to fit the "green streets" system throughout the city (City of Omaha, 2007b). The plan calls for streets to include space for all types of transportation including sidewalks and bicycle lanes as well as major landscaping improvements. Funding for this initiative would come from federal, state, and local levels. On the local level, funding would come from the City of Omaha's transportation bonds. The estimated costs to "green" a multi-lane, undivided, new/suburban road one-mile-long would be \$114,000. This would include the addition of 400 trees and 400 shrubs. At present, financing is not available to convert 120th Street into a "green street."

Mitigation

- Areas disturbed during construction would be reseeded, protected, and watered, as determined by NDOR's *Plan for the Roadside Environment* (NDOR, 2008). (City of Omaha)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to vegetation include:

- Standard Specification 202.01(4)(d) – Clearing and Grubbing (NDOR, 2007)
- Standard Specification 107.01(6) Amended A-43-0210 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 803.02 – Seeding – Material Requirements (NDOR 2007)
- Standard Specification 803.03 – Seeding – Construction Methods (NDOR, 2007)
- Standard Specification 806.02(4)(c) – Sodding – Material Requirements (NDOR, 2007)

P. Threatened and Endangered Species, Migratory Bird Treaty Act

Summary

Flora and fauna listed by the U.S. Fish and Wildlife Service (USFWS) as threatened or endangered are protected under the Endangered Species Act of 1973 as amended (ESA) (16 USC 1531 et. seq.). Under Section 7 of the ESA, any adverse effects to federally listed species would require consultation with the USFWS. Section 7 of the ESA requires federal agencies to ensure actions that they authorize, fund, or carry out are not likely to jeopardize the continued existence of proposed, threatened or endangered species or result in the destruction or adverse modification of their critical habitat. In addition, species listed as threatened or endangered by the State of Nebraska are protected under the Nebraska Nongame and Endangered Species Conservation Act (NESCA). The NESCA is regulated by NGPC.

The Migratory Bird Treaty Act of 1918 (MBTA), and amended 1989, states that the take (possess, hunt, pursue, wound, shoot, kill, capture, trap, collect, or attempt to do so) of a migratory bird is prohibited. The MBTA also states that it is illegal to collect, possess, and by any means transfer possession of any migratory bird nest. However, it does not contain any prohibition that applies to the destruction of a bird nest that has been abandoned (without birds or eggs), provided that no possession occurs during the destruction. Statutes other than the MBTA legally protect some unoccupied nests, including nests of threatened and endangered migratory bird species as well as bald and golden eagles, within certain parameters.

Affected Environment

An Endangered and Threatened Species Review was conducted for the Project according to the Programmatic Agreement for Nebraska Federal Aid Transportation Program. The concurrence package stating that the Project would have no effect to state or federally listed species was signed by FHWA on November 24, 2010. One species, the river otter (*Lontra canadensis*) was determined to have potentially suitable habitat in the Study Area. An evaluation of the Project actions determined that the Project would have no effect on the river otter. Documentation of concurrence is located in **Appendix F, Threatened and Endangered Species Concurrence**. On October 2, 2013, the USFWS published a proposal to list the Northern long-eared bat (*Myotis septentrionalis*) as endangered. An NDOR biologist re-evaluated the Project to determine the potential impact to Northern long-eared bats and their habitat. The NDOR biologist determined

the project “may affect, not likely to adversely affect” the Northern long-eared bat and will have “no effect” to all other state or federally listed species.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, no impacts to threatened or endangered species would occur.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for direct impacts to listed species or their habitat that may be present along those routes. Similarly, the nature and magnitude of the temporary increase in traffic on the alternative routes would not involve the potential for indirect impacts to listed species or their habitat that may be present.

Under the Preferred Alternative, activities that may affect, not likely to affect the Northern long-eared bat include: tree removal, bridge work, culvert work, and removal of structures and obstructions. No impacts to other state or federally listed species would occur.

Mitigation

- The Project would follow NDOR’s Avian Protection Plan (NDOR 2011b). The concurrence package for the Project includes the following Conservation Conditions and survey protocol (if applicable) that would be required for the Project based on the Programmatic Agreement for Endangered and Threatened Species.

General Conservation Conditions for All Projects (Responsible Party for the measure is found in parentheses):

- All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the Project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder, and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the Project area during surveys. If listed plants were identified during survey, any seed mix requirements identified during resource agency consultations shall be used for the Project. (NDOR Environmental)
- If species surveys are required for this Project, results would be sent by NDOR to the USFWS, NGPC, and if applicable the USACE. FHWA would be copied on submittals. (NDOR Environmental, District Construction)
- If federal or state listed species are observed during construction, contact NDOR Environmental. Contact NDOR Environmental for a reference of federal and state listed species. (NDOR Environmental, District Construction, Contractor)

- Environmentally sensitive areas would be marked on the plans, in the field, or in the contract by NDOR Environmental for avoidance. (NDOR Environmental, District Construction)
- Conservation conditions are to be fully implemented within the Project boundaries as shown on the plans. (District Construction, Contractor)
- The following Project activities shall, to the extent possible, be restricted to the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the Project, within the ROW designated on the Project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites. Any Project related activities that occur outside of these areas must be environmentally cleared/permitted with the USFWS and NGPC as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed Project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different group photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The District Construction Project Manager would notify NDOR Environmental which would coordinate with FHWA for acceptance if needed. The contractor must receive notice of acceptance from NDOR, prior to starting the above listed Project activities. These Project activities would not adversely affect state and/or federally listed species or designated critical habitat. (NDOR Environmental, District Construction, Contractor)
- If there is a change in the Project scope, the Project limits, or environmental commitments, the NDOR Environmental must be contacted to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the FHWA. (District Construction, Contractor)
- Requests for early construction starts must be coordinated by the Project Construction Engineer with NDOR Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes would require approval from the FHWA and could require consultation with the USFWS and NGPC. (District Construction, Contractor)
- Construction waste/debris would be disposed of in areas or a manner which would not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)
- Refueling would be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)

Conservation conditions that are included to address the Northern long-eared bat include:

- Tree clearing, bridge deck joint replacements over the bridge deck, bridge/>5-ft box-culvert removal activities would be scheduled to occur between October 1st – March 31st to avoid impacts to the northern long-eared bat roosting period. (NDOR Environmental, Construction, Contractor) or,
- If tree clearing, bridge deck joint replacement over the bridge deck, or removal of bridge/>5-ft box-culvert structures occurs during the northern long-eared bat maternal roosting period

(April 1st – September 30th), NDOR or a qualified biologist would perform surveys prior to the start of these activities at the following locations:

- Bridge crossing at Big Papillion Creek
- Bridge crossing at West Maple Ditch
- Tree removal locations along the northbound and southbound sides of 120th Street. If the species is absent, work may proceed. If the species is found, NDOR Environmental Section will consult with the USFWS, NGPC, and FHWA prior to the start of construction. (NDOR Environmental, Construction, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to threatened and endangered species include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

Q. Mobile Source Air Toxics

Summary

MSATs are regulated under the Clean Air Act and are administered by the EPA. Under Section 202 of the Clean Air Act, the EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources (66 FR 17229, March 29, 2001). An updated interim guidance was published by FHWA in October 2016 (FHWA Updated Interim Guidance on Mobile Source Air Analysis in NEPA Documents) to aid proponents in addressing MSATs. The updated guidance provides a tiered approach for MSAT analysis, including direction to use the Motor Vehicle Emissions Simulator model update released in 2014 (MOVES2014a) for both transportation conformity determinations and for NEPA purposes.

Affected Environment

For each alternative in this EA, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for the preferred alternative is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the 120th Street corridor and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to higher MSAT emissions for the preferred alternative along the road corridor, along with a corresponding decrease in MSAT emissions along the adjacent routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2014a model, emissions of all of the priority MSAT decrease as speed increases. Because the estimated VMT under each of the alternatives are nearly the same, it is expected there would be no appreciable difference in overall MSAT emissions between the two alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great

(even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, <https://www.epa.gov/iris/>). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>). As a result, there is no national consensus on air dose-response

values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that, with respect to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk” (<https://www.epa.gov/iris>).

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable ([https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/\\$file/07-1053-1120274.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)).

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Environmental Impacts

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA entitled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*, found at:

https://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.cfm.

The additional travel lanes contemplated as part of the Project would have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, there might be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than under the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that occur would along 120th Street from Stonegate Drive to Fort Street under the Preferred Alternatives. However, the magnitude and the duration of these potential increases compared to the No Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions

for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

No Build Alternative

Under the No Build Alternative, total VMT and vehicle speeds would likely be lower than they would be under the Preferred Alternative. The difference in long-term MSAT levels between the No Build Alternative and the Preferred Alternative would not be appreciable.

Preferred Alternative

Projects that result in increased travel speeds will reduce MSAT emissions per VMT basis. Under the Preferred Alternative, total VMT and vehicle speeds would likely be higher than they would under the No Build Alternative. The difference in long-term MSAT levels between the No Build Alternative and the Preferred Alternative would not be appreciable.

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Temporary use of the alternate routes would likely result in MSAT levels along those routes that would be higher than the baseline condition, although with no appreciable difference, due to the temporary increase in traffic volume.

Mitigation

- Dust emissions should be minimized by including techniques to control fugitive dust. These minimizations should be included in the construction plans and specifications with implementation during construction. (City of Omaha, Contractor)

R. Hazardous Materials

Summary

As defined by CFR Chapter 40 261 subpart C, hazardous materials are substances that because of their quantity, concentration, or physical, chemical, or infectious characteristics, may present a substantial danger to public health or the environment if released. Hazardous wastes could be liquids, solids, contained gases, or sludges, and could be the by-products of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides. Solid wastes are identified as hazardous if they are corrosive, ignitable, explosive, chemically reactive, or toxic. The Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act, the Toxic Substances Control Act, the Superfund Amendments and Reauthorization Act, and the Emergency Planning and Community Right-to-Know Act give regulation of hazardous wastes to EPA and other Federal and State Agencies. In Nebraska, hazardous wastes are also regulated under NAC Title 128, the Nebraska Hazardous Waste Regulations (NDEQ, 2007).

Environmental risk sites are those facilities and/or locations where hazardous substances, hazardous waste, or petroleum products were or could be released into the ground water, surface soils, or subsurface sediments. The term "Recognized Environmental Conditions" (RECs) means the presence of, or likely presence of, any hazardous substances or petroleum products on a property under consideration that may indicate an existing release, past release, or a material threat of a release of any hazardous substance or petroleum into the groundwater, surface water of that property or neighboring properties. REC's do not include "de minimis" conditions that do not present a threat to human health or the environment and that generally would not be subject to enforcement or regulation. The Study Area was evaluated for RECs and for their potential to impact, or be impacted by the Project.

Sites within the Study Area that contain hazardous waste must be identified and analyzed to determine if impacts from the proposed Project would cause public health concerns. Any hazardous waste impacts resulting from the proposed Project would require mitigation measures to eliminate or minimize the impacts. During the review of available resources, it was determined that hazardous waste locations within the Study Area were all related to Underground Storage Tanks (USTs). A field reconnaissance of the Study Area was conducted in 2010 to identify any above ground potential hazardous waste locations. No sites were found.

Affected Environment

Publicly available environmental databases were reviewed to identify any records pertaining to known hazardous waste sites located within 0.5 mile of the Study Area. Environmental Data Resources, Inc. (EDR) completed a search of federal and state environmental databases for sites located in and around the Study Area and provided a summary report of findings; the EDR report is available on request. Included in this search was a review of unmapped listings (known as "orphan sites"). The list was generated based on available facility information including, partial street address, city, and zip code. No orphan sites were identified within the Study Area. In addition to the EDR search, a *Hazardous Materials Review* (HMR) was completed for work associated with the proposed Project. The HMR follows the guidance from the Nebraska Department of Roads (NDOR) Hazardous Materials Review: NEPA Consultant Guidance document dated January 31, 2013 (**Appendix G**).

The sites described below qualify as "hazardous waste sites" (**Figure 14**). These sites were listed in the federal and state databases due to the presence and/or historical presence of hazardous substances.

The Knolls Golf Course

The Knolls Golf Course, a recreational area open to the public, has two USTs identified by the NDEQ's Leaking Underground Storage Tank and Surface Spill Site Information service (NDEQ, 2012b). Of these two storage tanks, one was identified in 1993 as leaking in the Leaking Underground Storage Tank (LUST) database. This tank has since been addressed and its status updated to "No Further Action (NFA)." It is likely that residual gasoline may be present in the soils.

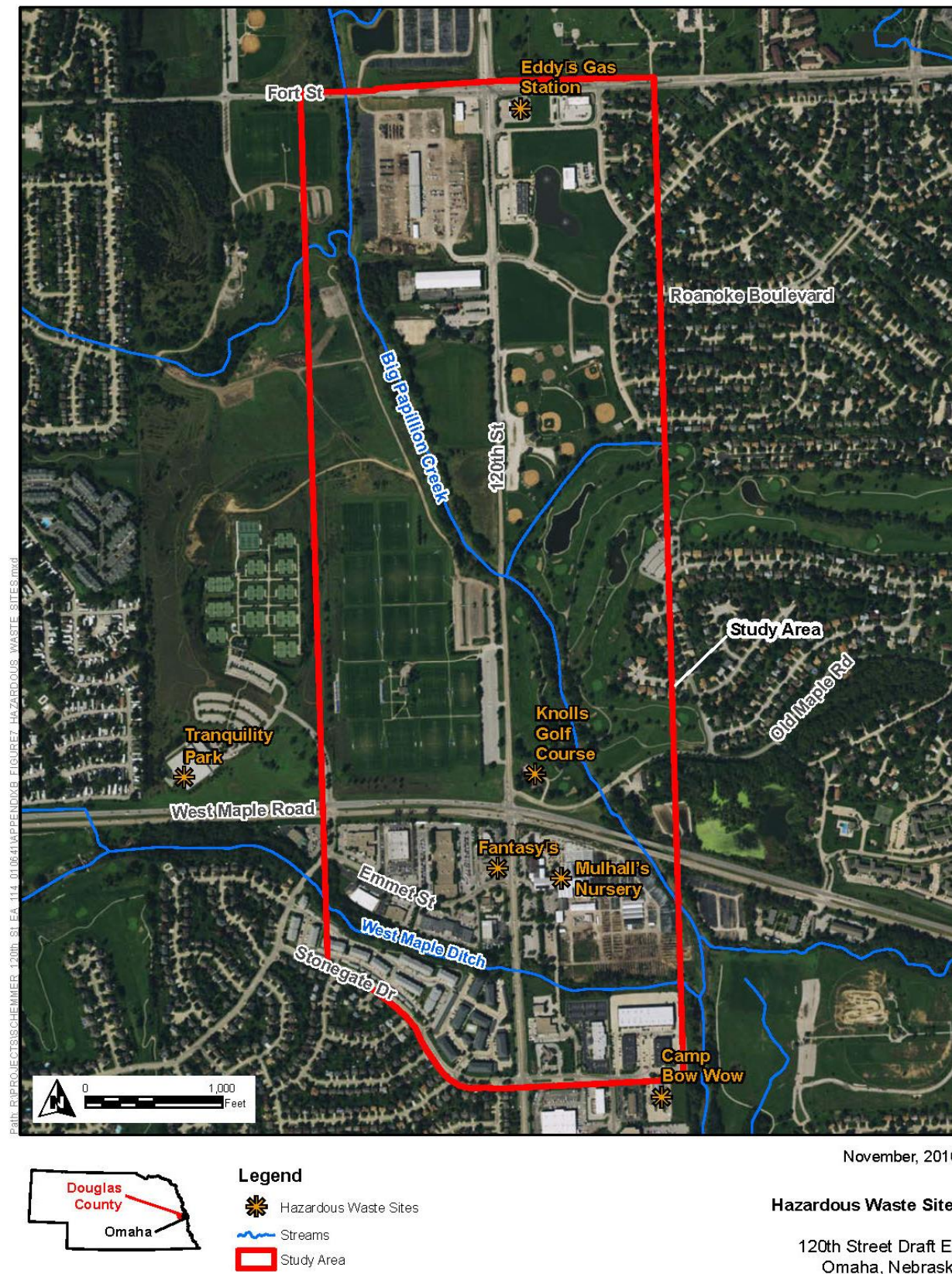


Figure 14. Hazardous Waste Sites

Mulhall's Nursery

Mulhall's Nursery, a landscaping, nursery and garden center, has four fiberglass reinforced plastic USTs that were installed in 2004. Two of the USTs are used for diesel storage and two are used for gasoline storage. Mulhall's previously had three USTs on their facility. These USTs were initially listed in the LUST database in 1993 due to a leaking gasoline tank. In 1999, Mulhall's was listed in the LUST database due to gasoline and diesel leaks. Mulhall's had these three LUSTs removed in 1999. A subsequent review of these two incidences has since achieved NFA status by the NDEQ. There is a potential for residual petroleum to be present in the soils. On November 2, 2011, a NDEQ Risk Based Corrective Action Tier I investigation was completed. The result of the investigation was that Chemicals of Concern (COC) have been evaluated and do not exceed the risk-based screening levels for any of the exposure pathways. The Tier I investigation identified groundwater flow direction at this facility to trend southwest toward the excavations. However, Tier I also demonstrates that the levels at the down-gradient MW-3 are non-detect or very low. Since this facility is 335 feet east of the Project and the COCs were evaluated to not exceed the risk based screening levels for any pathways, it does not appear that this hazardous waste facility would present a REC for the Project.

Fantasy's

Fantasy's, a gas station and convenience mart, has five steel USTs that were installed in 1989. Four of these tanks are currently used for gasoline storage with the fifth tank storing diesel fuel. In 1997, a gasoline and diesel leak was reported to NDEQ. This facility is located at the intersection of 120th and Emmet Street, immediately adjacent and slightly up-gradient of the limits of the temporary construction impacts. A Phase II Environmental Site Assessment was conducted in 1997 which determined that soil contamination and ground water contamination exceeded the minimum reporting levels. The Environmental Site Assessment identified the shallowest groundwater to be 12 feet at monitoring well 1-A. The anticipated depth of construction for this Project is not expected to exceed 10 feet. This facility was reported in the NDEQ database as "additional work needed, NDEQ has not yet directed the work to begin". In 2008, The NDEQ reviewed this facility and identified it as needing subsurface investigation in accordance with NDEQ's Rules and Regulations Title 118 (Ground Water Quality Standards and Use Classification). No further information is available for this facility. The release either has not yet been addressed, or the records have not been updated to reflect subsequent cleanup. A review of the NDEQ's leaks and spills database on September 29, 2013 showed this facilities status had not been updated. A review of NDEQ's list of backlogged facilities ranks Fantasy's as 94th. Based on these findings, this facility represents a low risk for REC for the Project from the potential for petroleum product to be present in the groundwater.

Tranquility Park

Tranquility Park is a City of Omaha recreational park. In 1992, NDEQ identified a LUST in the maintenance area of the facility. The status of the leak is "Additional work needed, NDEQ has not yet directed the work to begin." This facility is located approximately 0.4 mile west of the construction impacts. The general topography of the area is slightly rolling hills. A small rise in topography is present between the Project and this facility making it unlikely that this hazardous waste would impact Project construction.

Eddy's Gas Station

Eddy's Gas Station, a gas station and convenience mart, has four USTs at this location. Three of these are for gasoline and one is for diesel. However, none of these USTs has been listed as leaking.

Camp Bow Wow (formerly Professional Automotive Services)

One facility, Camp Bow Wow, was listed on the RCRA database. This facility is listed in the database as a non-generating site. An evaluation of the location in 2008 revealed no hazardous waste problems. This facility no longer uses hazardous waste materials.

Environmental Impacts

No Build Alternative

The No Build Alternative would not affect any of the hazardous waste sites identified by the NDEQ, as no disturbances or construction impacts would occur.

Preferred Alternative

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve the potential for disturbance of any hazardous materials that may be present along those routes.

The Knolls Golf Course and Mulhall's Nursery both were identified as containing LUSTs. The Knolls Golf Course was evaluated by NDEQ and received "No Further Action" status. This facility is unlikely to have RECs within the construction limits because it is located down-gradient. Mulhall's Nursery also received "No Further Action" status. Due to the facilities distance (approximately 335 feet) from the excavations for sewer work and the non-detect or very low detection for contaminants, it is not expected to encounter RECs within the Project construction limits.

One facility, Fantasy's, was identified as having an LUST and has been "backlogged" by the NDEQ. The contaminants for this facility are located within the groundwater. Since the shallowest groundwater level to this facility is 12 feet below surface and the anticipated depth of excavations for the storm sewer work is not expected to exceed 10 feet, it is not expected that the Project will encounter RECs at this location.

The hazardous waste site located on the Tranquility Park property is approximately 0.4 mile from the LOC. The gradient of the land at the hazardous waste location trends south, paralleling the Project. In addition, there is a small rise in topography between the hazardous waste site and the Project that would inhibit the spread of the waste towards the Project. This hazardous waste would not likely impact the Project.

There were no identified hazardous waste issues at Eddy's Gas Station or at Camp Bow Wow and therefore neither of these locations would impact the Project.

There is potential for lead plates and/or lead-based paint to be found on the existing Big Papillion Creek bridge structure, which is to be removed and replaced by a new structure as part of the Project. If lead plates are present, the contractor will need to transport the plates to a legitimate recycling facility, in accordance with NDOR's standard specifications and Title 128 Rules and Regulations Governing Hazardous Waste Management in Nebraska. Similarly, if the method of removal of painted components generates paint debris, the contractor will need to handle the debris in accordance with NDOR's standard specifications and Title 128.

Mitigation

- If contaminated soils are encountered during construction, all work within the identified area would stop until NDOR/FHWA is notified and a plan to remove the soils or waste has been implemented. The NDEQ would be involved in the mitigation process to ensure the appropriate actions take place. During construction, the potential exists for minor amounts of hazardous waste to spill. Should a minor spill occur during construction, NDEQ would be contacted for consultation to identify the appropriate actions. (City of Omaha, Contractor)
- If lead plates are present in the Big Papillion Creek bridge, the contractor should transport the plates to a legitimate recycling facility, in accordance with NDOR's standard specifications (see below) and Title 128 Rules and Regulations Governing Hazardous Waste Management in Nebraska. The contractor's implementation plan efforts shall be documented in Site Manager. (City of Omaha, Contractor)
- If the method of removal of painted components generates paint debris, the contractor should handle the debris in accordance with NDOR's standard specifications (see below) and Title 128. Caution shall be implemented to minimize the amount of potential lead-based paint material or debris from falling to the watercourse below the bridge. The contractor's implementation plan efforts shall be documented in Site Manager. (City of Omaha, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to hazardous materials impacts include:

- Standard Specification 701.01 – General Requirements - Description (NDOR, 2007)
- Standard Specification 107.01 as Amended A-43-0210 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 203.01 – Environmental Requirements (NDOR, 2007)
- Standard Specification 732 – Lead-based Paint Removal (NDOR, 2007)

S. Material Sources and Waste Materials

Summary

Material sources are used for the construction of projects and must adhere to environmental laws before their use. For some projects, material excavated from a project site may also be used for fill material or other construction needs. The Project requirements for material sources and details regarding material disposal are provided below. The contractor would obtain all environmental

clearances and permits required for balance work prior to obtaining material for the Project. NDOR's Standard Specification 208 specifies how all balance work and material waste areas must be restored.

Affected Environment

Sources for balance work or waste material are available in this region of Nebraska. Commercially owned sand and gravel pits are currently in operation in the vicinity of the Study Area.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, balance work or waste material would not be associated with this Project, so there would be no impacts to material sources or waste materials.

Preferred Alternative

Under the Preferred Alternative, approximately 50,000 cubic yards of balance work material would be required for the Project. While no source has been identified for the balance work, it is anticipated that materials would be available in the area. The Contractor would determine the source for the balance work material.

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Therefore, temporary use of the alternate routes would not involve any changes to the quantity or distribution of balance work or waste material associated with the Project.

Mitigation

- The bridge structure U182513915 has been tested for asbestos by a licensed asbestos inspector. No suspect ACM was found on the structure. The contractor is required to submit a written National Emission Standards for Hazardous Air Pollutants (NESHAP) notification. Since no asbestos is present, the notification is sent only to the NDEQ. The contractor shall submit the NESHAP Notification of Demolition and Renovation to NDEQ at least 10 working days prior to commencement of any demolition activities. The ten day clock starts with the day the Notification is postmarked, hand delivered or picked up by a commercial delivery service, such as UPS, FedEx, etc. Faxing documents is prohibited. The NDOR State Representative shall be provided copies of said notifications and their submittal date, which shall be recorded in Site Manager. (Contractor)
- The Contractor would obtain all the environmental clearances and permits, if required, for balance work prior to obtaining material. All excess balance or waste material would become the responsibility of the Contractor. The Contractor would be legally required to dispose of the excess material in accordance with NDOR Standard Specifications. (Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to material source and waste materials include:

- Standard Specification 701.01 – General Requirements - Description (NDOR, 2007)
- Standard Specification 203.01 – Removal of Structures and Obstructions – Description (NDOR, 2007)
- Standard Specification 203.02 – Removal of Structures and Obstructions – Construction Methods (NDOR, 2007)
- Standard Specification 203.03 – Removal of Structures and Obstructions – Method of Measurement (NDOR, 2007)
- Standard Specification 107.01 as Amended A-43-0210 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 205.02 – Excavation and Embankment – Material Requirement (NDOR, 2007)
- Standard Specification 208 – Borrow and Waste Site Restoration (NDOR, 2007)

T. Temporary Construction Impacts

Summary

Construction activities from the Project may lead to temporary short term impacts. These impacts usually include items such as construction noise, vehicular and pedestrian traffic accommodations, access to adjoining properties, and construction accommodations needed to build the Project.

Affected Environment

The Project area is typical of an urban environment, consisting of a variety of land uses, including residential and commercial properties such as retail, office buildings, and recreational facilities. 120th Street is a city artery that experiences heavy daily traffic. Construction activities are not currently in progress.

Environmental Impacts

No Build Alternative

Under the No Build Alternative, the Project would not be constructed. There would be no temporary construction impacts within the Study Area.

Preferred Alternative

The Preferred Alternative includes road and bridge widening, addition of sidewalks, and new storm water drainage systems to an approximate one-mile section of 120th Street located between Stonegate Drive and Roanoke Boulevard.

Anticipated phasing for 120th Street south of West Maple Road would include reducing 120th Street to two lanes with head-to-head traffic. The existing bridge over West Maple Ditch would be widened while traffic is maintained near the existing centerline. When bridge widening is completed traffic would be moved to the new southbound lanes to allow for reconstruction of the northbound lanes and utilities. Simultaneously, West Maple Road would be reconstructed in a similar fashion with traffic maintained on the westbound half of the existing roadway while the eastbound lanes are reconstructed with the portion of 120th Street south of West Maple Road. Temporary traffic crossovers would be provided to shift eastbound traffic to westbound lanes and vice versa. Left turns at the intersection of 120th Street will be prohibited for a two-month period to allow reconstruction of the West Maple median and permanent left turn lanes. Four phases may be required to complete all reconstruction within West Maple Road and south on 120th Street.

North of West Maple Road and south of Roanoke Boulevard, 120th Street would be closed to through traffic. Local access would be maintained to all properties along 120th Street at all times.

Various access points to individual businesses and facilities would be closed and/or altered as part of the Project, as discussed in **Section III.C**. Major construction is anticipated to be completed in two years with final grading and permanent seeding/sodding occurring in the spring following completion of construction. This may require winter monitoring of temporary erosion control systems. Although traffic would be diverted during construction, short-term temporary impacts may occur due to lane closures and temporary use of alternate routes necessary to accommodate specific construction activities/phases.

Beyond the minimal impacts associated with traffic using alternate routes, considerable avoidance and minimization measures have been included in the Project. These measures include the maintenance of vehicular and pedestrian traffic along the existing 120th Street and maintained access at all other intersections during construction. No improvements are planned for alternate routes.

Neither 120th Street nor West Maple Road is on FHWA's major truck routes for 2007 or the major truck routes forecast for 2040 (FHWA Office of Freight Management and Operations 2012a and 2012b). Interstate 80 is the only major freight corridor identified within the State of Nebraska (FHWA Office of Freight Management and Operations 2013); therefore, major freight traffic would not be likely to be affected by construction of the Project.

Mitigation

- Local access would be maintained to all properties along 120th Street at all times during construction. (City of Omaha, Contractor)
- The public and emergency services would be notified of road closures prior to them occurring. (City of Omaha)
- Message boards or similar means would be used to alert the public of road closures and alternate routes. (City of Omaha)
- Construction phasing would be utilized for West Maple Road and for portions of 120th Street south of West Maple Road to maintain traffic during construction. (City of Omaha)
- The roadway north of West Maple Road to south of Roanoke Boulevard would be closed to through traffic, with alternate routes via 132nd Street or 108th Street. (City of Omaha)
- A note would be included on the construction plans indicating that local access would be maintained to all properties along 120th Street at all times. (City of Omaha)

- Furthermore, per NDOR's Standard Specifications, the contractor shall, at all times and to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street (NDOR, 2007). (Contractor)
- If a road is closed, limited access must be maintained for authorized local traffic. If access is closed longer than one day, the Contractor would coordinate with the City's Project Manager and property owners. (City of Omaha, Contractor)

Standard Specifications

Construction activity on the Project would conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to temporary construction impacts include:

- Standard Specification 301.02(1a, 1b) General Requirements – Equipment (NDOR, 2007)
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

U. Secondary and Cumulative Impacts

Summary

This secondary and cumulative impacts assessment for the proposed Project is based on Council on Environmental Quality (CEQ) regulations. These regulations require the discussion of cumulative impacts include a list of past, present, and reasonably foreseeable anticipated future projects producing related or cumulative impacts. The discussions of cumulative impacts should consider the likelihood that impacts would occur and reflect the severity of the anticipated impacts.

This section identifies those past, present, and reasonably foreseeable projects in the vicinity of the proposed Project that could affect the same resources as those of the proposed Project and provides the following analysis:

- Determine whether the impacts of the proposed Project and the other projects would overlap in time or geographic extent
- Determine whether the impacts of the proposed Project would interact with or intensify the impacts of the other projects
- Identify and potentially significant resource-specific impacts

This section presents the analysis of the proposed Project's potential to result in cumulative impacts as a result of the combination of its impacts with those of the identified cumulative projects below. The goal of the analysis of cumulative effects is to quantify the impact on the environment resulting from the *incremental* effects of the proposed Project when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7). The analysis ensures that the proposed Project's potential effects are not considered in isolation. According to CEQ guidance, cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Affected Environment

The past, present, and future actions that have previously or in the future are expected to directly or indirectly affect resources in the vicinity of the Project are listed below:

Past Actions

- Development. Residential, commercial, and recreation facilities have developed along the existing 120th Street. City neighborhoods, businesses and parks have developed in the Study Area.
- 132nd Street – Patrick Street to Emmet Street. Upgraded an existing two-lane roadway to a five-lane urban section and included the installation of storm sewers. This Project completed the widening of 132nd Street from L Street (Hwy 275) to West Maple Road (Hwy 64) (City of Omaha, 2012d).
- 120th Street north of Roanoke Boulevard to Fort Street. This section of 120th Street was previously widened to four lanes with a raised median.

Present Actions

There are no known actions currently underway in the vicinity of the Project.

Future Actions

Reasonably foreseeable future actions include ongoing projects that are not expected to be completed until 2030 or later, projects that are included in the plans of federal, State, and local agencies (the City of Omaha and Douglas County), and private projects. The area reviewed for cumulative effects includes the Study Area and an approximate 20 square-mile area surrounding 120th Street that would be affected by the Project.

- Multiple-structure Commercial Development. Conversion of the previously undeveloped area east of 120th Street located between the little league baseball fields and Fort Street into a multiple-structure commercial development. Once finished, the development would contain four retail buildings, nine office buildings, one daycare center, one bank, two fast food restaurants, a 2.8-acre pond, and several parking lots, trees, and green spaces. To date, construction of one retail building, one office building, the pond, and several parking lots have been completed.
- Interconnected Trail System. Development of an interconnected trail system leading to parks, including Tranquility Park, located throughout the City is included in the “Parks Element” section of The Omaha Master Plan (City of Omaha, 2012d).
- West Maple Road. Development of West Maple Road into a major public transportation route utilizing the Metropolitan Area Transit bus system is included as a proposed development in the Omaha Master Plan (City of Omaha, 2012d).
- Residential Structures. The Omaha Master Plan includes proposed development of medium-density single-family and high-density multiple-family residential structures north and south of major streets, such as West Maple Street, in order to develop a population density capable of supporting a mass transit system. The City’s target population density is eight dwelling units per net residential acre (City of Omaha, 2012d).
- West Maple Road from 180th Street to 144th Street. Continued development of mixed-use commercial/residential areas at intersections of major streets, such as the intersection of

120th Street and West Maple Road, to develop a population density capable of supporting a mass transit system (City of Omaha, 2012d).

- North of Fort Street to State Street. The May 2035 MAPA LRTP identified a potential long-term project along 120th Street, north of Fort Street to Rainwood Road. This project has remained tentatively in the LRTP based on uncertain, long-term possible future needs, and does not appear in the 2014 TIP. No funding sources have been identified for long-term possible future projects. This project would only occur if the existing agricultural property north of Fort Street was eventually developed, and projected traffic volumes increase to a level requiring corridor improvement. This project may not occur before the 2030 time horizon of the LRTP and is contingent upon private development that may occur in the area (MAPA, 2010).
- State Street to Nebraska Highway 36. The May 2035 MAPA LRTP identified a potential long-term project along 120th Street from State Street to Nebraska Highway 36, which remains tentatively in the LRTP based on uncertain, long-term possible future needs, and does not appear in the 2014 TIP. No funding sources have been identified for long-term possible future projects. This project may not occur before the 2030 time horizon of the LRTP and is contingent upon private development that may occur in the area (MAPA, 2010).

Resources Considered for Cumulative Impact Analysis

The secondary and cumulative impacts of the above actions in combination with direct impacts associated with the Preferred Alternative could have impacts on the following resources:

- Land ownership, jurisdiction, and land use
- Section (4f) of the Transportation Act
- Section 6(f) Land and Water Conservation Fund Properties
- Noise
- Drainages and Floodplains
- The Clean Water Act (Sections 401, 402, and 404) (Wetland Impacts)

These resources are considered to be the key cumulative effect issues of the Project, and were considered along with potential impacts to these resources attributed to the aforementioned reasonably foreseeable projects. Potential cumulative impacts to these resources from the Preferred Alternative are discussed below. Other non-impacted resources are not included in the cumulative effects analysis.

Environmental Impacts

Secondary Impacts

During the construction period, some traffic that currently uses 120th Street would be shifted to other north-south routes in the vicinity, primarily 108th Street and 132nd Street. 108th Street and 132nd Street have the capacity to accommodate the temporary increase in traffic volume, and use of these streets and any other north-south streets in the vicinity as alternate travel routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways. Consideration of the potential effects of the temporary use of alternative routes identified no expected secondary effects for any of the resources addressed in the EA (see previous discussion throughout Chapter IV).

The Proposed Alternative would result in a four-lane urban roadway with adjacent sidewalks, a new bridge over Big Papillion Creek, a trail underpass, improved storm drainage, and improved intersection configurations. The direct impacts and secondary impacts, where applicable, for these improvements have been described elsewhere in this document. Additional secondary impacts resulting from these improvements would likely include improved traffic circulation, increased commerce at the retail sites, improved pedestrian safety access, and fewer accidents.

Cumulative Impacts

The Preferred Alternative is one of only three reasonably foreseeable roadway projects in the Project vicinity. The other two projects (North of Fort Street to State Street, and State Street to Northeast Highway 36) are not likely to be completed in the next 20 years. The remaining reasonably foreseeable projects include development plans and a trail addition to the Big Papio trail system. Implementation of the development plans could result in cumulative impacts to environmental and social resources in the area. Cumulative impacts could occur to noise, drainages and floodplains, and wetlands. Future development is not likely to cumulatively impact land ownership, jurisdiction and land use, or Section 4(f) or Section 6(f) properties as the development is proposed for private properties currently zoned for development. The proposed trail addition would have beneficial cumulative effects by creating greater pedestrian access to the area, improving quality of life, and adding recreational resources. One receiver in the Study Area, located at the Keystone Little League ball fields, is currently being impacted by noise above NAC. An additional two receivers, also at the Keystone Little League ball fields, would be impacted by future traffic. The reasonably foreseeable development and roadway projects are not proposed adjacent to the Keystone Little League ball fields, nor are they likely to occur simultaneous with the proposed Project, therefore cumulative impacts from noise are not anticipated.

The cumulative long-term affect to wetlands is a decrease of individual wetlands. Projects impacting wetlands require compliance with EO 11990's "no net loss" of wetlands along with the CWA and Section 404 permitting as needed, and involve avoidance, minimization, and mitigation processes. Wetlands being affected by the Project are anticipated to be mitigated through coordination with USACE. The restrictions on the development in wetlands and the requirements to compensate for any losses of wetlands would offset wetland impacts. Consequently, cumulative impacts to wetlands are not anticipated.

As discussed above, the temporary use of 108th Street and 132nd Street as alternate routes during the construction period would not result in any new ground disturbance or other physical changes to those existing roadways, and would only result in a temporary increase in traffic volume on those routes. Based on the limited magnitude and temporary duration of the traffic volume change, this aspect of the construction plan would not represent an identifiable change to the cumulative impacts associated with the Project.

Conclusion

Based on the above evaluation of potential impacts from the Project and in consideration of other past, present, and reasonably foreseeable projects potentially affecting the same resources and area, no significant secondary or cumulative impacts are anticipated as a result of the Project.

V. PUBLIC/AGENCY INVOLVEMENT/PROJECT COORDINATION

A. Agency Scoping

An Agency Scoping Meeting was held on October 2, 2008. A presentation of the Project including the Project description, and purpose and need was given to representatives from NDOR, the City of Omaha, NGPC, and USACE. Documentation of the meeting is provided in **Appendix E, Agency and Public Coordination**. A summary of the items discussed is summarized below.

USACE Comments

USACE described the water-related issues related to Big Papillion Creek that would need to be addressed in the NEPA document:

1. New storm sewer outfalls and existing drainages would need to be analyzed.
2. Storm water detention/dissipation may be required.
3. The Project should not contribute to further degradation of the bank.
4. Benching of the creek banks may be necessary to allow for storage capacity.

Response to USACE

1. New storm sewer outfalls are addressed in Section IV.K - Drainage and Floodplain Considerations, Section IV.M – The Clean Water Act, and Section IV.N – Impaired/Unique Waters.
2. Storm water detention/dissipation is discussed in Section IV.K – Drainage and Floodplain Considerations.
3. The degradation of Big Papillion Creek banks would include Bank stabilization measures including riprap placement and re-vegetation would prevent post-construction impacts.
4. Benching is discussed in Section IV.K – Drainage and Floodplain Considerations

NGPC Comments

- NGPC discussed comments related to fish and wildlife:
 1. There are no noted concerns for threatened and endangered species.
 2. Vegetation removal would need to occur outside of the migratory bird nesting season.
 3. Impacts to the creek may be a concern; shading on the creek banks is favorable.
 4. An assessment of the existing tree species within the Project limits would be conducted. The City Parks Department and NGPC would determine an acceptable tree replacement ratio (NGPC prefers a 3 to 1 tree replacement ratio).
- NGPC discussed Public Lands – Section 4(f) and 6(f) relating to Tranquility Park and The Knolls Golf Course:
 5. The process of permanent takings and replacement property was described in detail.
 6. A proposed parking lot replacement north of the soccer fields would likely not constitute a 6(f) taking.

7. If property is acquired from both Tranquility Park and The Knolls Golf Course, the combined value of these properties would dictate the park land replacement requirements at a single site.
8. Taking of park property for Big Papillion Creek improvements may or may not constitute a 6(f) taking depending on the design. If the property is still accessible by the public, it usually is not a 6(f) taking. Adding a wetland to retain storm water on park ground may constitute a 6(f) taking, depending on the design of the wetland feature.
9. A new bike trail constructed on 6(f) property may not constitute a 6(f) taking. However, this may also be an issue with FHWA in terms of defining the trail as recreational versus a transportation trail corridor.

Response to NGPC

1. The comment is noted. Threatened and endangered species are discussed in Section P.
2. The Project would follow NDOR's Avian Protection Plan which would include avoidance of construction outside the active nesting season, as applicable.
3. The comment is noted. Revegetation of the banks is included as part of mitigation.
4. The tree replacement ratio has not yet been determined.

For comments 5 through 9, Section 4(f) and 6(f) properties are discussed in Section F – Section 4(f) of the Transportation Act and Section 6(f) Land and Water Conservation Fund Properties, respectively.

An interagency meeting was held at the USACE Wehrspann Field Office on February 24, 2011 to discuss pre-application requirements. Agency representatives from USACE, NDOR, and the City of Omaha attended. An overview of the Preferred Alternative and a description of the hydrology/hydraulic modeling for Big Papillion Creek were presented. USACE discussed concerns regarding the findings of the wetland report determination and it was decided that the wetland report would be reviewed based on the information provided by USACE. Two agency meetings were held in October and November of 2012 to discuss the Project schedule and the Section 6(f) property, respectively. Documentation of the meetings is provided in **Appendix E, Agency and Public Coordination**.

B. Public Meeting

A public information meeting was held on January 18, 2011. Notifications of the meeting were advertised in the Omaha World Herald the week of December 20, 2010. In addition, two dynamic message boards were placed on 120th (one on the northbound side and one on the southbound side) on January 13, 2011. The purpose of the meeting was to communicate to the public the Project's purpose and need, display a design concept and solicit public comment. Forty-two members of the public signed-in at the meeting, not including city officials and consultants. Introductory comments were presented including a description of the Project's purpose and need and the Project limits followed by a question and answer (Q&A) session. The remaining portion of the meeting was conducted in an open house format with informational displays and stations located throughout the room. Project team members from the City of Omaha and Schemmer (consultant) were available to answer questions and take comments. Five questions were asked during the Q&A session, and six comments were recorded during the breakout session. Documentation of the meeting is provided in **Appendix E, Agency and Public Coordination**. A summary of the public questions and comments is provided in **Table V.1**.

Table V.1. Public Meeting Comment Summary

Questions and Responses
<p>Question #1: What will happen on 120th Street during construction?</p> <p>Response #1: 120th Street would be closed to through traffic north of West Maple and open to traffic south of West Maple during construction. Left turns would be provided during construction to help accommodate turning traffic at 120th and West Maple. A short term left turn restriction will be necessary at the intersection of 120th Street and West Maple to reconstruct median and left turn lanes. Closing 120th Street north of West Maple would shorten the construction time, but does add burden to alternate routes.</p>
<p>Question #2: Are trails incorporated into the Project?</p> <p>Response #2: Trails would be included between Old Maple Road and the Big Papillion Creek on the east side of 120th Street. This segment of trail is part of the Big Papillion Creek trail system. The current trail terminates south of Heflinger Park and the plan is to make a connection from the existing trail to the new trail along 120th Street. The future trail would pass under West Maple Road and cross Big Papillion Creek to connect to the 120th Street Project. The trail would pass under the new 120th Street bridge with plans to add trail west along Big Papillion Creek in the future as funds become available.</p>
<p>Question #3: Will Tranquility Park and Keystone Little League have access during construction?</p> <p>Response #3: The current plan is to eliminate the southernmost access due to its proximity to West Maple Road. Access to the parks would be maintained at all times during construction.</p>
<p>Question #4: Will traffic be maintained during construction south of West Maple Road?</p> <p>Response #4: Traffic would be maintained at all times. Typically two lanes of traffic are provided while building two new lanes. Due to the large volume of vehicles at West Maple Road, a left turn would be provided for turning vehicles and to accommodate trucks during construction. A short term left turn restriction will be necessary at the intersection of 120th Street and West Maple to reconstruct median and left turn lanes.</p>
<p>Question #5: How close will the new roadway be to Keystone Little League? The current road is close and feels unsafe when watching baseball games. Are there any requirements for guardrail or other barriers?</p> <p>Response #5: There is no accident history on the existing roadway at this location. The distance between the travel lane and the ballpark would be similar for the Preferred Alternative as compared to the existing. Federal and State standards are followed for barrier warrants. This is a federally funded Project and those standards would be followed. At this time there are not warrants for additional barrier protection along Keystone property. The existing roadway is a non-curbed section. The new roadway would have the following design improvements:</p> <ul style="list-style-type: none"> • 6" curb • 12.5' setback to back of sidewalk to give out of control vehicles the opportunity to correct and get back on the road. • An MSE wall would be installed between the road and ball fields to minimize impacts
Comments and Responses
<p>Comment #1: One resident near the area recommended/concurred with closing the south access to Tranquility Park. She stated this access is a safety problem with vehicles leaving Tranquility and vehicles stopped on 120th Street trying to turn into this driveway. She has witnessed many near miss rear end accidents due to this driveway.</p> <p>Response #C1: This recommendation has been incorporated into the Preferred Alternative.</p>

Comments and Responses (continued)

Comment #2: The owner/operator of Erin Court is concerned about restricted access. He thought this would have a major impact on business. He questioned why we couldn't provide one additional opening in the median at that location. He also had a question if Roanoke Boulevard would have traffic signals soon.

Response #C2: *These comments were noted during the meeting for further consideration during project development and design. The location of Erin Court is too close to the intersections Roanoke Boulevard and 120th to allow for northbound access, as identified in the Omaha Master Plan - Transportation Element (City of Omaha, 2012d). Further discussion with property owners along Roanoke Boulevard explained that limited sight distance in this area would create the potential for sideswipe accidents, and U-turns would be the best compromise for maintaining safety while providing access U-turns would be provided at Roanoke Boulevard and the full access provided near Station 537+00. Roanoke Boulevard would include traffic signals.*

Comment #3: The owner/operator of Keystone Little League described existing drainage issues and is concerned how new drainage would change their property. There is a swale east of Station 541+50 that drains to the roadway ditch, but currently requires ponding before water would outlet. Also pointed out a standing water problem in the outfield to the ROW line at Station 533+00 to 534+00. Access during construction and getting traffic in and out at just one drive at the north end of property is also a concern. The busy season for Keystone is April to June with playoffs during June. July is less busy, but still constant traffic in and out during game days. Keystone has some future projects to install sidewalks to all fields and maybe add some retaining walls around some fields.

Response #C3: *These comments were noted during the meeting for further consideration during project development and design. Further investigation indicates that this issue is beyond the scope of the current project.*

Comment #4: The owner/operator of Schmidley's Golf range understood the need to remove the trees along his east property line, but wondered about the process for replacing them. His concern was the trees provide a buffer to restrict errant golf balls reaching 120th Street.

Response #C4: *At present, the trees do not protect 120th Street from errant golf balls. All ROW acquisitions will be completed using a certified appraiser in the state of Nebraska and the land owner will be compensated in accordance with the Nebraska Department of Roads guidelines.*

Comment #5: The owner/operator of Carstar commented favorably on the proposed Project. He had some concerns with traffic during construction.

Response #C5: *The project will maintain traffic phasing during construction with access to the business maintained throughout construction.*

Comment #6: Several other commuters commented on the proposed Project and were in favor of the improvements, especially those south of West Maple Road. Some asked if there was any way to move the Project up for earlier construction.

Response #C6: *Construction is currently scheduled for 2018.*

Written Comment Form Summary

Written Comment #1: Looks Good. Let's get it built.

Response WC#1: *Thank you for your comment.*

Written Comment #2: Please email plan.

Response WC#2: *The plan will be available online through NDOR's website: <http://www.transportation.nebraska.gov/environment/req-env-docs/index.htm> when published.*

Written Comment #3: Thank you for posting signs to tell commuters of the meeting. Concern that closure will cause excessive commuter impact as NW commute time traffic on Maple & Blondo already backed up today. Request to limit closures where possible.

Response WC#3: *Thank you. The project is designed to limit closure times and lengths to the extent practicable.*

Written Comment #4: I like the concept of the street design and think it will improve traffic flow.

Response WC#4: *Thank you for your comment.*

Written Comment #5: I like the design. I am concerned with how long the construction will take and the impact of poor access during construction.

Response WC#5: *Thank you for your comment. The construction schedule and access restrictions to local businesses will be limited to the extent practicable. Access to all businesses will be maintained during construction.*

Written Comment #6: Having lived with the congestions for so long, we understand the compromises required for an effective solution. We are willing to give up two of our three access points to 120th provided the one remaining is large enough to accommodate the traffic of 16 acres of retail. For both aesthetic and safety reasons, we strongly urge that the utility lines be buried.

Response WC#6: *Thank you for your comments. We appreciate your flexibility. The access to Mulhall's should be sufficient to address the 16 acres of retail. The utility companies are responsible for the relocation of their lines.*

C. Public Hearing

A public hearing will be scheduled once FHWA, NDOR, and the City of Omaha have concurred on the DEA and FHWA issues a Notice of Public Availability. The public hearing is tentatively planned for May 2017.

VI. MITIGATION MEASURES

To comply with all applicable Federal, State and local legislation, as well as any general or special conditions required by pending permits, the mitigation measures/environmental commitments listed in **Section VI.A** have been incorporated into the Preferred Alternative. These commitments would be implemented during the appropriate Project phase. The mitigation measures are presented in association with the resource for which they most directly act to avoid or minimize impacts. Although some of the listed measures apply to multiple resources, they are listed only once, under the resource which they most directly benefit.

In addition to the mitigation measures, NDOR Standard Specifications and Special Provisions would be applied to the Preferred Alternative to provide specific methodology. **Section VI.B** provides a compiled list of Standard Specifications and Special Provisions.

A. Mitigation

Land Ownership, Jurisdiction, and Land Use

- Impacts of ROW acquisition will be offset by payment of fair market value for the property rights and damages that will occur as a result of the undertaking. The Uniform Relocation Assistance and Real Property Act of 1970, as amended, will be followed. (City of Omaha)
- Access to the individual businesses, parks, ballfields, golf course and other facilities will be maintained during construction. (City of Omaha, Contractor)

Socioeconomic Considerations

- Per Standard Practice, The City of Omaha shall notify the public at the start of construction by placing notices in the newspaper 14 calendar days prior to construction, and electronic message boards maybe used prior to the beginning of construction activities. (City of Omaha)
- The City of Omaha shall also notify emergency services such as police and fire departments before construction activities begin, as well as maintain continued coordination throughout construction. Emergency services providers will be invited to the pre-construction meeting for this Project. (City of Omaha)
- Mitigation measures will be part of the final design of the Project and will include the following:
 - notifying individuals affected by construction, as well as those travelling through the corridor during construction (City of Omaha),
 - coordinating with Metro for the temporary rerouting of Omaha Metro Express Route 98 (City of Omaha),
 - communicating with all local properties in the Project to ensure temporary access is provided during construction (City of Omaha, Contractor), and
 - coordinating with neighborhood groups, emergency services, and businesses during construction to maintain access during construction (City of Omaha).
- Access to Tranquility Park, The Knolls Golf Course, individual businesses, residences and other recreational facilities in the area will be maintained during construction. (Contractor)

- Measures that will be employed to minimize the effects to school bus, Omaha Metro and emergency services routes, truck delivery for manufacturing and businesses, commuter traffic, traffic transporting goods and services, as well as general traffic during construction equipment movements and material deliveries include
 - phasing of construction,
 - creating an on-site temporary road to maintain through traffic on West Maple Road and public access to the facilities and services along 120th Street near West Maple Road, and
 - notifying the public prior to commencement of construction to allow for route planning and adjustments if needed. (City of Omaha, Contractor)

Title VI/Environmental Justice

- If nighttime work with lights is needed during construction (an action that is not currently assessed in the EA), the effects of this use on adjacent populations will be reevaluated during final design. (City of Omaha)

Cultural Resources

No mitigation is required because no historic properties were identified.

- City of Omaha personnel and contractors will remain alert to the possibility of uncovering something of potential historic interest throughout construction. If previously unidentified archaeological resources are discovered in the course of the Project, all work will immediately be suspended in the vicinity of the find until the resources are properly evaluated in terms of the NRHP eligibility criteria (36 CFR 60.4) and NDOR Standard Specification 107.10 (pg. 60, 2007) in consultation with NeSHPO. In the event that human remains are uncovered, work will stop immediately and NeSHPO and the County Sheriff will be notified. (City of Omaha, Contractor)

Section 4(f) of the Transportation Act

To comply with all applicable Federal, State and local legislation, as well as any general or special conditions required by pending permits, mitigation measures/environmental commitments to minimize harm to Section 4(f) resources will have to be incorporated into the Preferred Alternative. These commitments will be implemented during the appropriate Project phase. Mitigation measures will comply with all applicable provisions of the City of Omaha's Best Management Practices as identified in the Omaha Regional Stormwater Design Manual, Chapter 8 Stormwater Best Management Practices (City of Omaha, 2006). (City of Omaha)

Mitigation measures will include the following:

- Maintain Tranquility Park access throughout the construction period. (City of Omaha, Contractor)
- Reseed all disturbed areas per the park/golf course design once construction activities have been completed. (City of Omaha, Contractor)
- Restore all temporary easements to preconstruction conditions or better once construction has been completed. (City of Omaha, Contractor)
- Maintain play at Knolls Golf Course without restrictions during construction. (City of Omaha, Contractor)

- Ensure that the footprint of construction/design will not impact the layout of fairways or impair the public's ability to play at Knolls Golf Course during final design. (City of Omaha, Contractor)
- Acquire ROW to one foot beyond sidewalks and three feet beyond the face of retaining walls. (City of Omaha, Contractor)
- Permanent easements will not be acquired from Tranquility Park. (City of Omaha)
- Maintain Knolls Golf Course access throughout the construction period. (City of Omaha, Contractor)
- Use of Tranquility Park for recreation will not be impacted during construction. (City of Omaha, Contractor)
- Replace an equivalent number of parking stalls to those removed at Tranquility Park by the Project by extending the parking to the west. (City of Omaha, Contractor)
- Replace Tranquility Park parking stalls prior to removal of the existing stalls to maintain public access. (City of Omaha, Contractor)
- Construct two new drives to replace the lost entrance for Tranquility Park. (City of Omaha, Contractor)
- Provide a set of plans or graphics showing the impacts to the Section 4(f) resources to the Tranquility Park management and the Knolls Golf Course management during final design, once the footprint is finalized. (City of Omaha, Contractor)
- Reevaluate the EA and Section 4(f) assessment if the footprint or impacts change from those disclosed in the Section 4(f) assessment or EA during final design. (City of Omaha, Contractor)
- Consult FHWA to determine if a reevaluation of the EA and Section 4(f) assessment is needed. (City of Omaha, Contractor)
- Provide additional mitigation or design changes if requested by the Tranquility Park or Knolls Golf Course management or if they raises concerns during final design. (City of Omaha, Contractor).

Section 6(f) Land and Water Conservation Fund Properties

- Mitigation will be provided through the selection of one of the 6(f) conversion properties to replace the impacted Section 6(f) resource. Information regarding the type and location of construction activities (i.e., a Proposed Action) within these areas will not be known prior to completion of this EA. When the conversion property is identified, the Section 6(f) land conversion documentation and replacement property will be completed by the City of Omaha according to the Land and Water Conservation Fund Conversion of Use Regulations and Procedures Manual administered through the Nebraska Game and Parks Commission. This coordination will occur during the ROW stage of the project. (City of Omaha)
- If Site 2 is selected as the 6(f) conversion property through the Section 6(f) conversion process, the known cultural resource, Military Road, will not be impacted as part of development of the site. (City of Omaha)
- The total acreage of the acquired property will be commensurate with the acreage required as part of the Section 6(f) conversion process. (City of Omaha)

- The location of the conversion property will occur within one of the two sites reviewed in the FHWA's EA and will avoid impacts to social, environmental and economic resources. (City of Omaha)
- Upon completion of the Section 6(f) conversion review, a re-evaluation of the Project's NEPA analysis will be required. (City of Omaha)

Noise

Noise abatement measures were determined to be infeasible for the Project.

Utilities

- The Contractor will follow NDOR's Policy for Accommodating Utilities on State Highway Right-of-Way (NDOR, 2001). The City of Omaha will be responsible for notifying utility companies of the need for relocation during the design stage of the Project. Agreements with the utility companies will be coordinated by the City of Omaha and NDOR prior to construction. The Contractor will be responsible for notifying utility companies of relocation needs during the construction phase of the Project for utilities that were not relocated prior to construction. A redundant service will be provided so that customers do not experience the effect of being without service. (City of Omaha, Contractor)
- The utility companies will be responsible for relocation costs (Utility companies)

Land Resources

- Nearly all of the fill materials will be obtained from off-site borrow sources. Soil cuts will be limited and will consist of either topsoil or pavement materials. The topsoil will be excavated to a depth of six inches and stockpiled for later use covering the finished grades and vegetated slopes. No additional mitigation related to topography, soils, geologic and mineral resources, or agriculture is proposed or required. (City of Omaha)

Drainage and Floodplain Considerations

- Re-analysis of the benching and roadway profile for 120th Street will occur if upstream water surface elevations change as compared to existing water surface conditions. (City of Omaha)

Groundwater

No mitigation related to groundwater is proposed or required.

The Clean Water Act (Sections 401, 402, and 404) (Wetland Impacts)

- The City of Omaha will apply for and obtain a Section 404 NWP for these impacts during final design. (City of Omaha)
- The Contractor will adhere to the conditions of the Section 404 permit. (Contractor)
- Areas subject to temporary impacts will be returned to pre-construction elevations. (Contractor)
- BMPs for construction will be implemented, and the general and special conditions required under the NWP will be followed. (City of Omaha, Contractor)
- In accordance with EO 11990, detailed mitigation commitments to compensate for permanently-impacted wetlands will be developed during the NWP application process. (City of Omaha)

- Impacts resulting from project site runoff (pollutants, erosion and sediment control) and activities will be minimized by implementation and maintenance of BMPs, required by the SWPPP, under the NPDES Construction Stormwater permit. (City of Omaha)
- Requirements of the City of Omaha grading permit will also be followed to minimize offsite impacts. (City of Omaha, Contractor)
- Bank stabilization measures including riprap placement and re-vegetation will prevent post-construction impacts. (City of Omaha, Contractor)
- A project specific SWPPP will be developed prior to construction activities by the City of Omaha in accordance with NDEQ, NPDES, and CSW-NOI permit. (City of Omaha)
- Project plans for long-term stormwater management will need to be evaluated for compliance with City of Omaha MS4 program requirements. This review could result in the identification of additional best management practices for stormwater discharge that will be needed. (City of Omaha)

Impaired/Unique Waters

- Impacts resulting from project site runoff (pollutants, erosion and sediment control) and activities will be minimized by implementation and maintenance of BMPs, required by the SWPPP, under the NPDES Construction Stormwater permit. Requirements of the City of Omaha grading permit will also be followed to minimize offsite impacts. Bank stabilization measures including riprap placement and re-vegetation will prevent post-construction impacts. (City of Omaha)

Vegetation

- Areas disturbed during construction will be reseeded, protected, and watered, as determined by NDOR's *Plan for the Roadside Environment* (NDOR, 2008). (City of Omaha)

Threatened and Endangered Species, Migratory Bird Treaty Act

- The Project will follow NDOR's Avian Protection Plan (NDOR, 2011b). The concurrence package for the Project includes the following Conservation Conditions and survey protocol (if applicable) that will be required for the Project based on the Programmatic Agreement for Endangered and Threatened Species.

General Conservation Conditions for All Projects (Responsible Party for the measure is found in parentheses):

- All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the Project vicinity as shown in the *Plan for the Roadside Environment*. However, within the first 16 feet of the road shoulder, and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the Project area during surveys. If listed plants were identified during survey, any seed mix requirements identified during resource agency consultations shall be used for the Project. (NDOR Environmental)
- If species surveys are required for this Project, results will be sent by NDOR to the USFWS, NGPC, and if applicable the USACE. FHWA will be copied on submittals. (NDOR Environmental, District Construction)

- If federal or state listed species are observed during construction, contact NDOR Environmental. Contact NDOR Environmental for a reference of federal and state listed species. (NDOR Environmental, District Construction, Contractor)
- Environmentally sensitive areas will be marked on the plans, in the field, or in the contract by NDOR Environmental for avoidance. (NDOR Environmental, District Construction)
- Conservation conditions are to be fully implemented within the Project boundaries as shown on the plans. (District Construction, Contractor)
- The following Project activities shall, to the extent possible, be restricted to the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the Project, within the ROW designated on the Project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites. Any Project related activities that occur outside of these areas must be environmentally cleared/permitted with the USFWS and NGPC as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed Project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different group photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The District Construction Project Manager will notify NDOR Environmental which will coordinate with FHWA for acceptance if needed. The contractor must receive notice of acceptance from NDOR, prior to starting the above listed Project activities. These Project activities will not adversely affect state and/or federally listed species or designated critical habitat. (NDOR Environmental, District Construction, Contractor)
- If there is a change in the Project scope, the Project limits, or environmental commitments, NDOR Environmental must be contacted to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the FHWA. (District Construction, Contractor)
- Requests for early construction starts must be coordinated by the Project Construction Engineer with NDOR Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes will require approval from the FHWA and could require consultation with the USFWS and NGPC. (District Construction, Contractor)
- Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)
- Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)

Conservation conditions that are included to address the Northern long-eared bat include:

- Tree clearing, bridge deck joint replacements over the bridge deck, bridge/>5-ft box-culvert removal activities will be scheduled to occur between October 1st – March 31th to avoid impacts to the northern long-eared bat roosting period. (NDOR Environmental, Construction, Contractor) or,
- If tree clearing, bridge deck joint replacement over the bridge deck, or removal of bridge/>5-ft box-culvert structures occurs during the northern long-eared bat maternal roosting period

(April 1st – September 30th), NDOR or a qualified biologist will perform surveys prior to the start of these activities at the following locations:

- Bridge crossing at Big Papillion Creek
- Bridge crossing at West Maple Ditch
- Tree removal locations along the northbound and southbound sides of 120th Street. If the species is absent, work may proceed. If the species is found, NDOR Environmental Section will consult with the USFWS, NGPC, and FHWA prior to the start of construction. (NDOR Environmental, District Construction, Contractor)

Mobile Source Air Toxics

- Dust emissions should be minimized by including techniques to control fugitive dust. These minimizations should be included in the construction plans and specifications with implementation during construction. (City of Omaha, Contractor)

Hazardous Materials

- If contaminated soils are encountered during construction, all work within the identified area will stop until NDOR/FHWA is notified and a plan to remove the soils or waste has been implemented. The NDEQ will be involved in the mitigation process to ensure the appropriate actions take place. During construction, the potential exists for minor amounts of hazardous waste to spill. Should a minor spill occur during construction, NDEQ will be contacted for consultation to identify the appropriate actions. (City of Omaha, Contractor)
- If lead plates are present in the Big Papillion Creek bridge, the contractor shall transport the plates to a legitimate recycling facility, in accordance with NDOR's standard specifications (see below) and Title 128 Rules and Regulations Governing Hazardous Waste Management in Nebraska. The contractor's implementation plan efforts shall be documented in Site Manager. (City of Omaha, Contractor)
- If the method of removal of painted components generates paint debris, the contractor shall handle the debris in accordance with NDOR's standard specifications (see below) and Title 128. Caution shall be implemented to minimize the amount of potential lead-based paint material or debris from falling to the watercourse below the bridge. The contractor's implementation plan efforts shall be documented in Site Manager. (City of Omaha, Contractor)

Material Sources and Waste Materials

- The bridge structure U182513915 has been tested for asbestos by a licensed asbestos inspector. No suspect ACM was found on the structure. The contractor is required to submit a written NESHAP notification. Since no asbestos is present, the notification is sent only to the NDEQ. The contractor shall submit the NESHAP Notification of Demolition and Renovation to NDEQ at least 10 working days prior to commencement of any demolition activities. The ten day clock starts with the day the Notification is postmarked, hand delivered or picked up by a commercial delivery service, such as UPS, FedEx, etc. Faxing documents is prohibited. The NDOR State Representative shall be provided copies of said notifications and their submittal date, which shall be recorded in Site Manager. (Contractor)
- The Contractor will obtain all the environmental clearances and permits, if required, for balance work prior to obtaining material. All excess balance or waste material will become the responsibility of the Contractor. The Contractor will be legally required to dispose of the excess material in accordance with NDOR Standard Specifications. (Contractor)

Temporary Construction Impacts

- Local access will be maintained to all properties along 120th Street at all times during construction. (City of Omaha, Contractor)
- The public and emergency services will be notified of road closures prior to them occurring. (City of Omaha)
- Message boards may be used to alert the public of road closures and alternate routes. (City of Omaha)
- Construction phasing will be utilized for West Maple Road and for portions of 120th Street south of West Maple Road to maintain traffic during construction. (City of Omaha)
- The roadway north of West Maple Road to south of Roanoke Boulevard will be closed to through traffic, with alternate routes via 132nd Street or 108th Street. (City of Omaha)
- A note will be included on the construction plans indicating that access is to be maintained to all properties along 120th Street at all times. (City of Omaha)
- Furthermore, per NDOR's Standard Specifications, the contractor shall, at all times and to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street (NDOR, 2007). (Contractor)
- If a road is closed, limited access must be maintained for authorized local traffic. If access is closed longer than one day, the Contractor will coordinate with the City's Project Manager and property owners. (City of Omaha, Contractor)

B. Standard Specifications and Special Provisions

Land Ownership, Jurisdiction, and Land Use

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The following standard specifications pertain to land ownership, jurisdiction, and land use:

- Standard Specification 105.12 – Control of Work – Use of Land (NDOR, 2007)
- Standard Specification 104.08 – Scope of Work – Final Clean Up (NDOR, 2007)
- Standard Specification 107.12 – Legal Relations and Responsibility to the Public – Responsibility for Damage, Injury, or Other Claims (NDOR, 2007)
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

Socioeconomic Considerations

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to socioeconomics includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

Title VI/Environmental Justice

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to environmental justice includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

Cultural Resources

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The following standard specifications pertain to cultural resources:

- Standard Specification 107.10 – Legal Relations and Responsibility to the Public - Archaeological and Paleontological Discoveries (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

Section 4(f) of the Transportation Act

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to Section 4(f) of the Transportation Act include:

- Standard Specification 104.01 – Scope of Work – Intent of Contract (NDOR, 2007)
- Standard Specification 104.08 – Scope of Work – Final Cleaning Up (NDOR, 2007)
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.07 – Public Convenience and Safety (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

Section 6(f) Land and Water Conservation Fund Properties

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to Section 6(f) properties includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

Noise

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable section in the Standard Specifications relating to noise includes:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

Utilities

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to utilities include:

- Standard Specification 105.06 – Control of Work – Cooperation with Utilities (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)
- Standard Specification 107.12 – Legal Relations and Responsibility to the Public – Responsibility for Damage, Injury, or Other Claims (NDOR, 2007)
- Standard Specification 107.16 – Legal Relations and Responsibility to the Public – Contractor's Responsibility for Utility Property and Services (NDOR, 2007)

Drainage and Floodplain Considerations

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to drainages and floodplains include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

Groundwater

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The following standard specifications pertain to land ownership, jurisdiction, and land use:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

The Clean Water Act (Sections 401, 402, and 404) (Wetland Impacts)

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to groundwater include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 107.09 – Legal Relations and Responsibility to the Public – Preservation and Restoration of Property, Trees, Monuments, etc. (NDOR, 2007)

Special Provisions

- Temporary Water Pollution Control (B-3-0509) - Establishes the required documentation included in the Environmental Commitment Document and Project Erosion and Sediment Control Inspection

- Storm Water Pollution Prevention Plan (A-20-0307) - Requires the Contractor to understand the terms and conditions of the NPDES Construction Stormwater General Permit
- Storm Water Discharges (A-43-0408) - Requirements associated with storm water discharges from construction sites to Waters of the State of Nebraska

Impaired/Unique Waters

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to impaired/unique waters include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

Special Provisions

- Temporary Water Pollution Control (B-3-0509) - Establishes the required documentation included in the Environmental Commitment Document and Project Erosion and Sediment Control Inspection
- Storm Water Pollution Prevention Plan (A-20-0307) - Requires the Contractor to understand the terms and conditions of the NPDES Construction Stormwater General Permit
- Storm Water Discharges (A-43-0408) - Requirements associated with storm water discharges from construction sites to Waters of the State of Nebraska

Vegetation

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to vegetation include:

- Standard Specification 202.01(4)(d) – Clearing and Grubbing (NDOR, 2007)
- Standard Specification 107.01(6) Amended A-43-0210 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 803.02 – Seeding – Material Requirements (NDOR 2007)
- Standard Specification 803.03 – Seeding – Construction Methods (NDOR, 2007)
- Standard Specification 806.02(4)(c) – Sodding – Material Requirements (NDOR, 2007)

Threatened and Endangered Species, Migratory Bird Treaty Act

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to threatened and endangered species include:

- Standard Specification 107.01 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)

Hazardous Materials

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to hazardous materials impacts include:

- Standard Specification 701.01 – General Requirements - Description (NDOR, 2007)
- Standard Specification 107.01 as Amended A-43-0210 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 203.01 – Environmental Requirements (NDOR, 2007)
- Standard Specification 732 – Lead-based Paint Removal (NDOR, 2007)

Material Sources and Waste Materials

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to material source and waste materials include:

- Standard Specification 701.01 – General Requirements - Description (NDOR, 2007)
- Standard Specification 203.01 – Removal of Structures and Obstructions – Description (NDOR, 2007)
- Standard Specification 203.02 – Removal of Structures and Obstructions – Construction Methods (NDOR, 2007)
- Standard Specification 203.03 – Removal of Structures and Obstructions – Method of Measurement (NDOR, 2007)
- Standard Specification 107.01 as Amended A-43-0210 – Legal Relations and Responsibility to the Public – Laws to be Observed (NDOR, 2007)
- Standard Specification 205.02 – Excavation and Embankment – Material Requirement (NDOR, 2007)
- Standard Specification 208 – Borrow and Waste Site Restoration (NDOR, 2007)

Temporary Construction Impacts

Construction activity on the Project will conform to the Standard Specifications for Highway Construction (NDOR, 2007). The applicable sections in the Standard Specifications relating to temporary construction impacts include:

- Standard Specification 301.02(1a, 1b) General Requirements – Equipment (NDOR, 2007)
- Standard Specification 107.01 – Legal Relations and Responsibility to the Public (NDOR, 2007)

VII. CONCLUSION

This DEA has been prepared in accordance with the regulations of CEQ (40 CFR 1500-1508) as well as FHWA's implementing regulations (23 CFR 771.119 and 23 CFR 771.135). This Project is being developed by the City of Omaha, NDOR, and FHWA as a Federal-Aid project. After a review and study of the possible impacts associated with the proposal, FHWA determined that a DEA was appropriate for this action to determine if the proposed improvement would significantly or adversely affect the total quality of human health and the environment.

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