

**CITY OF ELKO NEW MARKET
CITY COUNCIL AGENDA
ELKO NEW MARKET CITY HALL
601 MAIN STREET
ELKO NEW MARKET, MINNESOTA 55054
THURSDAY, JUNE 28, 2018**

**BUSINESS MEETING
6:30 PM**

1. Call to Order

2. Pledge of Allegiance

3. Adopt/Approve Agenda

4. Presentations, Proclamations and Acknowledgements (PP&A)

5. Public Comment

Individuals may address the Council about any item not contained on the regular agenda. The Council may limit the time allotted to each individual speaker. A maximum of 15 minutes will be allotted for Public Comment. If the full 15 minutes are not needed for Public Comment, the City Council will continue with the agenda. The City Council will not normally take any official action on items discussed during Public Comment, with the exception of referral to staff or commission for future report.

6. Consent Agenda

All matters listed under consent agenda are considered routine by the City Council and will be acted on by one motion in the order listed below. There may be an explanation, but no separate discussion on these items. If discussion is desired, that item will be removed from the consent agenda and considered separately.

- a. Approve June 14, 2018 Minutes of the City Council Meeting
- b. Approve Payment of Claims and Electronic Transfer of Funds
- c. Adopt Resolution 18-36 Adopting Priority Goals for the City of Elko New Market
- d. Adopt Resolution 18-37 Approving Outdoor Concerts and Events for Captain Blacks Bar & Grill
- e. Adopt Resolution 18-38 Transfer of Funds

7. Public Hearings

8. General Business

- a. CSAH2/91 Roundabout
 - a. Accept Concept Design Report
 - b. Preliminary Design Phase Proposal

9. Reports

- a. Administration
- b. Public Works
- c. Police Department
- d. Fire Department
- e. Engineering
- f. Community Development

- g. Parks Department
 - i. Parks Commission Minutes
- h. Other Committee and Board Reports
 - i. Scott County Association for Leadership and Efficiency (SCALE)
 - ii. Minnesota Valley Transit Authority (MVTA)
 - iii. I35 Solutions Alliance
 - iv. Chamber of Commerce
 - v. Regional Council of Mayors
 - vi. Civic & Community Events Committee (CCEC)
 - vii. Downtown Improvement Committee
 - viii. 50 By 30 Collective Impact Project
 - Steering Committee
 - Transportation Committee
 - Housing Committee
 - Workforce Committee

10. Discussion by Council

11. Adjournment

CITY COUNCIL WORK SESSION

June 14, 2018

Minutes

1. CALL TO ORDER

The meeting was called to order by Mayor Crawford at 6:30 p.m.

Members Present: Mayor Crawford, Councilmembers: Berg, Julius, Timmerman and Timmons

Members Absent: None

Also Present: City Administrator Terry, Police Chief Mortenson, City Engineer Revering and City Clerk Green

2. PRESENTATIONS

None

3. REPORTS

None

4. GENERAL DISCUSSION

Goals and Visioning

City Administrator Terry and the City Council reviewed the Community Vision and Goals. After a lengthy discussion, Council approved the current community vision and minor changes to the following goals:

- Develop a more diverse tax base, create more local employment opportunities and promote additional businesses and services within the community. ~~Promote high quality residential development, including a broad spectrum of housing choices in both type and cost.~~
- The acquisition of land for public purposes, including, but not limited to ~~water treatment facilities~~ public utilities, library, parks and interchange rights-of-way. Position the City to take advantage of opportunities to acquire land for public purposes.
- Promote high quality residential development, including a broad spectrum of housing choices in both type and cost, the development of residential lots and an increase in residential building permit activity.

5. REPORTS (Continued)

None

6. ADJOURNMENT

The Work Session was adjourned at 7:25 p.m.

1. CALL TO ORDER

The meeting was called to order by Mayor Crawford at 7:30 p.m.

Members Present: Mayor Crawford, Councilmembers: Berg, Julius, Timmerman and Timmons

Members Absent: None

Also Present: City Administrator Terry, Police Chief Mortenson, City Attorney Poehler, City Engineer Revering and City Clerk Green

2. PLEDGE OF ALLEGIANCE

Mayor Crawford led the Council and audience in the Pledge of Allegiance.

3. ADOPT/APPROVE AGENDA

MOTION by Councilmember Timmons, second by Councilmember Timmerman to approve the agenda as revised.

May 24, 2018 Revised City Council Meetings Minutes

APIF, MOTION CARRIED

4. PRESENTATIONS, PROCLAMATIONS AND ACKNOWLEDGEMENTS

Municipal Separate Storm Sewer Systems (MS4) Annual Meeting

Engineer Revering gave the City Council and audience a presentation on the Annual Meeting for Municipal Separate Storm Sewer Systems (MS4). The City of Elko New Market is required to be covered under the Municipal Separate Storm Sewer Systems (MS4) permit program administered by the Minnesota Pollution Control Agency (MPCA). The permit stipulates that the City must hold a meeting each year.

Council directed Staff to do a presentation at a future Council Meeting impacts to wetland and drainage area buffers.

5. PUBLIC COMMENT

Scott County Commissioner Wolf gave the Council updates on activities within Scott County including I35 Road Construction Project, Scott County Road Projects and Spring Lake Park new trail.

6. CONSENT AGENDA

MOTION by Councilmember Berg, second Councilmember Julius to approve Consent Agenda as amended.

- a) Approve Revised May 24, 2018 Minutes of the City Council Meeting
- b) Approve Payment of Claims and Electronic Transfer of Funds
- c) Adopt Resolution 18-32 Reporting Performance Measurements Results to Office
- d) Approve an Agreement for Professional Services with Bolton & Menk Inc. (BMI) for Engineering Services – **Pulled and moved to General Business 8e**
- e) Adopt Ordinance No. 172 Amending Title 11, Chapter 2-2 of the City Code Concerning Commercial Vehicle Definition – **Pulled and moved to General Business 8c**
- f) Approve Website Domain Name Agreement with Neustar, Inc.
- g) Approve Agreement for Municipal Advisor Services Between the City of Elko New Market and Springsted
- h) Adopt Resolution 18-33 Appointing Lori Nelson to the Community and Civic Events Committee
- i) The Doublewide
 - a. Adopt Resolution 18-34 Approving Outdoor Concerts and Events
 - b. Adopt Resolution 18-35 Approving Temporary Expansion of Licensed Premises

APIO, MOTION CARRIED

7. PUBLIC HEARINGS

None

8. GENERAL BUSINESS

Request for Waiver of Expenses Related to Processing of Applications

In 2016, Elko Speedway applied for an amendment to the Speedway PUD to combine the conditions imposed by the approved Elko Marketplace PUD and the requirements of the Speedway license, along with additional changes requested by the applicant as the PUD amendment progressed through the process.

The City required a fee, escrow of \$5,000 for the processing of the PUD application and a \$1,500 escrow for a separate minor PUD amendment. The applicant was responsible for any external City costs associated with processing the application. Those external costs would be applied against the escrow and the applicant would still liable for those costs that may exceed the escrow.

The total bill back cost for the processing of the application was \$20,485. The applicant has paid \$11,500 to date and is requesting that the City waive the remaining fees of \$8,985 based on the following:

- The Speedway did not receive invoices in a timely fashion, thereby reducing or eliminating the ability of the Speedway to make decisions regarding the progress of the application that may have affected expenses that were incurred.
- The delay inhibited the ability of the Speedway to assess the expenses for purposes of discussion or dispute, if appropriate.
- The public received some benefit from the revised ordinance by improving the administration of the revised ordinance.
- The cumulative fees for processing the application were disproportionate to the nature of the application and significantly greater than expected.

After a lengthy discussion on this item, the City Council decided not to charge the remaining fees.

MOTION by Councilmember Timmons, second by Councilmember Timmerman not to charge Elko Speedway the remaining fees of \$8,985. **APIF, MOTION CARRIED**

Approve Purchase Agreement Between City of Elko New Market and Global Properties, LLC

The City received an offer, dated May 30, 2018, to purchase a 3.1 City-owned parcel within the Dakota Acres plat. In 2006/2007, the area was approved for townhome development but due to the recession the original development never came to fruition. Only eight (8) of the originally planned seventy-one (71) townhome units were constructed.

Global Properties, LLC has made an offer to purchase the City-owned property within the Dakota Acres plat with the intention to construct 56 apartment units on the property. The units would be contained within two 16-unit buildings and one 24-unit building. The property would need to be rezoned and platted to accommodate the proposed development.

After holding a discussion on this item, a **MOTION** was made by Councilmember Timmerman, second Councilmember Timmons to accept and approve the Purchase Agreement with Global Properties, LLC. **APIF, MOTION CARRIED**

Discuss Barsness Project Collection

At the May 24, 2018 meeting of the City Council, the Council discussed collection of amounts owed on the Barsness Project applications. After some discussion, the Council tabled item until the June 14, 2018 meeting.

MOTION by Councilmember Timmons, second by Councilmember Timmerman to remove the Barsness Project Collection Discussion from the table. **APIF, MOTION CARRIED**

Council held a discussion on Warren Barsness amounts owed to the City of Elko New Market for processing of land use applications for a total amount of \$8,768.00. Staff asked for Council direction regarding collection of amounts owed on the Barsness Project applications.

MOTION by Councilmember Timmons, second by Councilmember Timmerman to pursue the collection of amounts owed on the Barsness project. Ayes: Councilmember Timmons and Timmerman Nays: Mayor Crawford, Councilmembers Berg and Julius. **MOTION FAILED**
The City will not pursue collection of amounts owed on the Barsness Project applications.

Engineering Agreement

Mayor Crawford asked that this item be pulled from the Consent Agenda. Mayor Crawford asked if there was language included in the Engineering Agreement stating the contractor would be held responsible for any mistakes done by the consultant during a project. City Attorney Poehler stated that she felt the language stated in the agreement was adequate.

At the end of the discussion, a **MOTION** was made by Councilmember Timmons, second by Councilmember Timmerman to approve the Agreement for Professional Services for Bolton & Menk, Inc. (BMS) for Engineering Services. **APIF, MOTION CARRIED**

Commercial Vehicle Definition Ordinance Amendment

Economic Development Specialist Christianson gave the Council background information on discussions held at previous Planning

Christianson noted that upon review of other community ordinances, and a review of various truck and cube van specifications, the Planning Commission has recommended that the gross vehicle weight rating (GVWR) that defines a Class I and II Commercial Vehicle be reduced from 18,000 lbs. to 14,000 lbs. The Planning Commission has also recommended that the vehicle size (length and height) be increased to be (1) height to nine feet six inches and length to twenty-two feet and six inches.

Councilmember Julius stated he had held discussions with Kevin Marek, owner of Marek's Towing regarding the impact the Planning Commission recommendation would have on Mr. Marek's business. Councilmember Julius requested Mr. Marek discuss with the rest of the

Council the discussions held between Councilmember Julius and Kevin Marek regarding tow trucks in residential developments. Mr. Marek informed the City Council that if the gross vehicle weight rating was reduced to 14,000 lbs., he would not be able to park any of his tow trucks in residential developments and would impact the response time for his vehicles.

After discussing this item, Council directed Staff to change the reference relating to Commercial Vehicles gross vehicle weight rating from 14,000 lbs. to 18,000 lbs. and include vehicles must be parked in resident's driveway. Christianson stated that the Traffic Section of City Code will have to be reviewed to determine if changes are required. Staff will bring the revised Ordinance back at the next Council Meeting.

9. REPORTS

a) ADMINISTRATION

Discussion Regarding Legal Services Request for Proposals

City Administrator Terry discussed possible criteria for completion of the Request for Proposals (RFP) for legal services with the City Council. Administrator Terry requested two councilmembers serve on the review panel for legal services. Councilmembers Berg and Timmerman volunteered to serve on the review panel.

b) PUBLIC WORKS

Written Public Works Superintendent Report included in Council Packet.

c) POLICE DEPARTMENT

Written Police Chief Monthly Report included in Council Packet. Police Chief Mortenson gave the Council an update on police officer interview schedule.

d) FIRE DEPARTMENT

None

e) ENGINEERING

None

f) COMMUNITY DEVELOPMENT

Written draft May 29, 2018 Planning Commission Minutes were included in Council Packet.

Community Development Specialist Christianson gave the Council community development updates.

g) PARKS DEPARTMENT

Parks Commission Update included in Council Packet.

h) OTHER COMMITTEE AND BOARD REPORTS

i. SCALE

Mayor Crawford gave a brief update on the last SCALE Meeting which included a presentation on social media.

ii. MVTA

None

iii. I35 SOLUTIONS ALLIANCE

Councilmember Timmons gave the Council an update on the last I35 Solutions Alliance Meeting which included discussions on review of projects on priority list, Orange Line FTA readiness assessment has been done, contract awarded for I35 over the river construction project, Green Line agreement has been completed between the Metropolitan Council and Hennepin County, and working on 2019 Appropriation Budget.

iv. CHAMBER OF COMMERCE

Councilmember Timmerman reminded the Council of the upcoming Chamber of Commerce Golf Tournament to be held Friday, June 22, 2018.

Councilmember Berg inquired as to why there are local businesses signs posted around the City that say “New Market” and not “Elko New Market”.

Councilmember Timmerman will have this item brought up at the next Chamber of Commerce Meeting for discussion.

v. REGIONAL COUNCIL OF MAYORS

Mayor Crawford and City Administrator Terry provided an update to the Council on the last Regional Council of Mayors Meeting which included a presentation on downtown land use and return of investments.

vi. COMMUNITY AND CIVIC EVENTS COMMITTEE

City Clerk Green gave the Council an update on the upcoming Fire Rescue Days.

vii. DOWNTOWN IMPROVEMENT COMMITTEE

None

viii. 50 BY 30 COLLECTIVE IMPACT PROJECT

- Steering Committee – Mayor Crawford updated the Council that a new Project Coordinator has been selected.
- Transportation Committee – Mayor Crawford updated the Council that the Transportation Committee is working on a pilot program in Elko New Market for providing vehicle repairs for individuals that need financial assistance.
- Housing Committee – Councilmember Julius provided the Council with notes from the last Housing Committee Meeting.
- Work Force Committee – Councilmember Timmons updated the Council on the last Work Force Committee Meeting which included discussions on changing meetings from monthly to quarterly, setting up task oriented work groups and working on developing website.

10. DISCUSSION BY COUNCIL

Councilmember Timmons noted that there will be a food shelf in Elko New Market next Wednesday and that they are looking for volunteers. Staff will post this event in case there is a quorum of councilmembers attending.

Councilmember Berg updated the Council that the City of West St. Paul decided to reinstate the rental license for Mr. Gregory Mailand for a 30-unit apartment building that had previously been denied.

Mayor Crawford updated the Council that the owner of the Chinese Restaurant located in the same building with New Market Bank has found a home to temporarily rent in Elko New Market and the tentative opening date of the restaurant is mid-July.

11. ADJOURNMENT

MOTION by Councilmember Julius, second by Councilmember Timmerman to adjourn the meeting at 10:03 p.m. **APIF, MOTION CARRIED**

Respectfully submitted by:

Sandra Green, City Clerk



STAFF MEMORANDUM

SUBJECT:	Presentation of Elko New Market Claims and Electronic Transfer of Funds
MEETING DATE:	June 28, 2018
PREPARED BY:	Lelia Leonhardt, Accountant
REQUESTED ACTION:	Approve Payment of Current Claims

COMMUNITY VISION:

- A mature growing freestanding suburb of the Twin Cities Metropolitan Area, preserving historic landmarks and small town character while providing suburban amenities and services, as well as full range of employment, housing, business, service, social, technology infrastructure and recreational opportunities for citizens and visitors
- Promote a diverse commercial base including light industrial and facilitating planned redevelopment which will be aesthetically pleasing with architectural standards that promotes quality development
- Provide a full range of municipal services to its residents. The City will allocate sufficient resources to meet the growing needs of the community
- A comprehensive park and trails system that will have sufficient facilities, play fields and open space to meet the needs of residents
- An effective and efficient transportation system, including access to the greater metropolitan area, transit opportunities, and improved connectivity to the interstate
- Provide community oriented local government and be financially sound, engaging in long-term financial planning to provide municipal services without undue burden on tax payers

5 YEAR GOALS:

- Diverse tax base, employment opportunities, additional businesses and services, promote high quality broad spectrum of residential development
- Advance "shovel ready" status of areas guided for commercial and industrial development
- Acquisition of land for public purposes, position City to take advantage of land acquisition opportunities
- Enhance quality of life through parks, trails, recreational programming and cultural events
- The development of residential lots and an increase in residential building permit activity

COMMUNITY ORIENTED LOCAL GOVERNMENT:

- Community Involvement
- Organizational Improvement
- Problem Solving
- Performance Measurement
- Professionalism

BACKGROUND

Each month the Accountant presents for approval the Elko New Market Claims and Electronic Transfer of Funds.

BUDGET IMPACT:

Budgeted

Attachments:

- Check Summary Register

CITY OF ELKO/NEW MARKET

*Check Summary Register©

June 2018

Name	Check Date	Check Amt
AUTO PAYS		
Paid Chk# 005573E PERA	6/14/2018	\$7,609.16 Vendor Liability
Paid Chk# 005574E MN DEPT OF REVENUE	6/14/2018	\$1,982.36 Vendor Liability
Paid Chk# 005575E INTERNAL REVENUE SERVICE	6/14/2018	\$8,892.91 Vendor Liability
Paid Chk# 005576E NEW MARKET STATE BANK	6/14/2018	\$15.00 JUNE PAYROLL ACH FEE
Paid Chk# 005577E HEALTH EQUITY, INC.	6/14/2018	\$591.53 H.S.A. Employee contribution
Paid Chk# 005578E INTEGRA TELECOM INC.	6/20/2018	\$241.61 Police Dept Phone/Fax
Paid Chk# 005579E INTEGRA TELECOM INC.	6/20/2018	\$534.60 Area Hall Phone/SCADA
Paid Chk# 005580E XCEL ENERGY	6/29/2018	\$388.40 Streetlights
Paid Chk# 005581E MN VALLEY ELECTRIC	6/22/2018	\$20.00 268X Xerxes Water Tower, Elko
Paid Chk# 005582E INTEGRA TELECOM INC.	6/20/2018	\$49.99 139503 - 25499 Natchez Ave
Paid Chk# 005583E INTEGRA TELECOM INC.	6/20/2018	\$168.56 937759 - 25499 Natchez Ave Bld
Paid Chk# 005584E DAKOTA ELECTRIC ASSN	6/30/2018	\$127.67 Ptarmigan Drive Streetlights

Total Checks \$20,621.79

PRE-PAID		
Paid Chk# 038579 NICHOLS, SCOTT	6/13/2018	\$125.00 COMMUNITY PICNIC - BALLOON ART
Paid Chk# 038580 UNITED STATES POSTAL	6/7/2018	\$298.48 Postage
Paid Chk# 038581 NICOLLET COUNTY	6/13/2018	\$20.00 2018 NOTARY REGISTRATION - LELIA
Paid Chk# 038582 IUOE LOCAL #49	6/18/2018	\$138.00 JUNE DUES
Paid Chk# 038583 UNITED STATES POSTAL	6/18/2018	\$318.62 2018 FIRE RESCUE DAYS NEWSLETTER

Total Checks \$900.10

CHECK REGISTER		
Paid Chk# 038584 ACE HARDWARE & PAINT	6/28/2018	\$29.96 BUILDING MAINTENANCE
Paid Chk# 038585 ACE HARDWARE & PAINT4	6/28/2018	\$49.52 BUILDING MAINTENANCE
Paid Chk# 038586 AEM FINANCIAL SOLUTIONS,	6/28/2018	\$6,250.00 Financial Services
Paid Chk# 038587 AIRGAS USA, LLC	6/28/2018	\$132.65 FD - Oxygen
Paid Chk# 038588 ASTECH ASPHALT SURFACE	6/28/2018	\$9,769.92 2018 CRACK SEALING
Paid Chk# 038589 BOLTON & MENK	6/28/2018	\$12,420.00 CHRISTMAS PINES - T17.116183
Paid Chk# 038590 BUSINESS ESSENTIALS	6/28/2018	\$60.75 Office Supplies
Paid Chk# 038591 CAMPBELL KNOTSON	6/28/2018	\$6,741.38 BARSNESS COMMERCIAL DEV
Paid Chk# 038592 CDW GOVERNMENT	6/28/2018	\$95.20 PD - CISCO SMARTNET
Paid Chk# 038593 CINTAS CORPORATION NO. 2	6/28/2018	\$63.89 UNIFORMS
Paid Chk# 038594 COPY-RIGHT PRINTING	6/28/2018	\$101.00 FIRE RESCUE - SPEEDWAY SPONSOR
Paid Chk# 038595 CORE & MAIN LP	6/28/2018	\$1,746.19 WATER REPAIRS
Paid Chk# 038596 ENM FIRE RELIEF ASSN.	6/28/2018	\$59,073.60 2018 - 1ST HALF CONTRIBUTION
Paid Chk# 038597 FASTENAL COMPANY	6/28/2018	\$171.12 PW - OPERATING SUPPLIES
Paid Chk# 038598 HAWKINS, INC.	6/28/2018	\$25.00 PW - Water Chemicals
Paid Chk# 038599 JEFFERSON FIRE & SAFETY,	6/28/2018	\$201.11 PW - SMALL TOOLS
Paid Chk# 038600 KEEPRS, INC.	6/28/2018	\$143.98 PD - Uniforms
Paid Chk# 038601 LANO EQUIPMENT, INC.	6/28/2018	\$484.47 PW - FLEET
Paid Chk# 038602 LARKSTUR ENGINEERING	6/28/2018	\$8.41 PW - FLEET
Paid Chk# 038603 LEAGUE OF MN CITIES INS	6/28/2018	\$46,452.00 GENERAL LIABILITY 2018-2019
Paid Chk# 038604 MARKET VILLAGE SR RES	6/28/2018	\$332.39 WATER/LAWN CARE
Paid Chk# 038605 MENARDS - APPLE VALLEY	6/28/2018	\$955.74 PARK REPAIRS
Paid Chk# 038606 MORRIS LEATHERMAN C	6/28/2018	\$4,500.00 FINAL PAYMENT FOR COMMUNITY SURVEY
Paid Chk# 038607 MTI DISTRIBUTING INC.	6/28/2018	\$103.86 PW - Fleet Maint & Equip
Paid Chk# 038608 MUNICIPAL INSPECTIONS, INC.	6/28/2018	\$19,619.90 EROSION CONTROL INSPECTIONS
Paid Chk# 038609 NORTHWEST ASSOCIATED	6/28/2018	\$2,132.80 FOOD TRUCKS
Paid Chk# 038610 NAPA AUTO PARTS	6/28/2018	\$294.61 PW - SMALL TOOLS
Paid Chk# 038611 NORTHERN TOOL & EQUIPMENT	6/28/2018	\$129.97 BUILDING MAINTENANCE
Paid Chk# 038612 PPG ARCHITECTURAL	6/28/2018	\$558.00 STREETS
Paid Chk# 038613 QUILL CORPORATION	6/28/2018	\$210.81 Operating Supplies
Paid Chk# 038614 R&R CLEANING CONTRACTORS,	6/28/2018	\$139.05 Rugs
Paid Chk# 038615 R.J. SAYERS DISTRIBUTING, LLC	6/28/2018	\$212.28 PW - FLEET
Paid Chk# 038616 SCHLOMKAS PORTABLE	6/28/2018	\$710.00 Portable Restrooms
Paid Chk# 038617 SCOTT COUNTY TREASURER	6/28/2018	\$16,856.00 2018 - 1ST 1/2 TREATED SALT

CITY OF ELKO/NEW MARKET

*Check Summary Register©

June 2018

Name	Check Date	Check Amt
<u>CHECK REGISTER CONTINUED</u>		
Paid Chk# 038618 SCOTT COUNTY RECORDER	6/28/2018	\$230.00 ENCROACHMENT RECORDINGS
Paid Chk# 038619 VISA	6/28/2018	\$2,251.11 JUNE STATEMENTS
	Total Checks	\$193,256.67
<u>DIRECT DEPOSITS</u>		
Paid Chk# 501795E Bi-Weekly ACH	06/14/2018	\$29,961.90



STAFF MEMORANDUM

SUBJECT: Adopt Priority Goals
MEETING DATE: June 28, 2018
PREPARED BY: Thomas Terry, City Administrator
REQUESTED ACTION: Adopt Resolution 18-36 Adopting Priority Goals for the City of Elko New Market

COMMUNITY VISION:

- A mature growing freestanding suburb of the Twin Cities Metropolitan Area, preserving historic landmarks and small town character while providing suburban amenities and services, as well as full range of employment, housing, business, service, social, technology infrastructure and recreational opportunities for citizens and visitors
- Promote a diverse commercial base including light industrial and facilitating planned redevelopment which will be aesthetically pleasing with architectural standards that promotes quality development
- Provide a full range of municipal services to its residents. The City will allocate sufficient resources to meet the growing needs of the community
- A comprehensive park and trails system that will have sufficient facilities, play fields and open space to meet the needs of residents
- An effective and efficient transportation system, including access to the greater metropolitan area, transit opportunities, and improved connectivity to the interstate
- Provide community oriented local government and be financially sound, engaging in long-term financial planning to provide municipal services without undue burden on tax payers

5 YEAR GOALS:

- Diverse tax base, employment opportunities, additional businesses and services, promote high quality broad spectrum of residential development
- Advance "shovel ready" status of areas guided for commercial and industrial development
- Acquisition of land for public purposes, position City to take advantage of land acquisition opportunities
- Enhance quality of life through parks, trails, recreational programming and cultural events
- The development of residential lots and an increase in residential building permit activity

COMMUNITY ORIENTED LOCAL GOVERNMENT:

- Community Involvement
- Organizational Improvement
- Problem Solving
- Performance Measurement
- Professionalism

BACKGROUND:

The visioning and goal setting process is a precursor to the formal 2019 budgeting process. A simple but successful process was used to assist the City Council in identifying and discussing issues that are facing the City of Elko New Market. The process is used as a tool to help the Council develop a common vision and goals to be used in providing a framework for shaping policy, setting priorities and budgeting.

The City has a finite or limited amount of resources (funding, staff time, etc.). Inevitably, the “wants and needs” of the community are greater than the City’s ability to meet them all. Ultimately, the Council must make decisions regarding the allocation of the City’s limited resources. The goal setting process is designed to help the council focus their decisions regarding resource allocation. The overall process involves four steps: (1) develop a common vision for community, (2) identify community issues, (3) establish goals, and (4) action. The vision was a mental image of the community 20-30 years in the future that is both desirable and feasible. The vision is not so much an end product, as a direction in which the community should be moving. The vision serves as the foundation for the rest of the process. The Council reaffirmed the currently adopted Vision Statement.

The Council was asked to identify the most important issues that are facing the community within the next 10 years. For purposes of the discussion, issues were defined as problems, pressures, needs and other factors that significantly impact the community. The Community vision and issues served as the backdrop developing the priority goals. The Council reviewed the issues that had been previously in the 2017 visioning and goal setting process. Additional clarification was provided for previously identified issues related law enforcement and public works resources. Specifically, identifying staffing, facilities and technology as law enforcement resource issues. And, equipment and staffing as resource issues for public works. The Council also added Infrastructure integrity, the cost of developing core infrastructure and the cost of water to the list of issues.

For the purposes of the process, goals were defined as projects or activities that merit special attention and/or focused resources. Goals should be easily defined and measurable for progress and/or completion. In addition, the goals should be reasonably achievable within a 1-5 year time frame. The goals are used to provide a framework for shaping policy, setting priorities and budgeting. Since action items necessary to achieve the identified goals may require funding, this exercise serves as an excellent lead-in to the City’s annual budget process.

DISCUSSION:

At the June 14th Work Session, the Council reviewed the adopted vision and priority goals for the community and reached consensus on the current community vision and minor changes to the following goals:

- Develop a more diverse tax base, create more local employment opportunities and promote additional businesses and services within the community. ~~Promote high quality residential development, including a broad spectrum of housing choices in both type and cost.~~

- The acquisition of land for public purposes, including, but not limited to ~~water treatment facilities~~ public utilities, library, parks and interchange rights-of-way. Position the City to take advantage of opportunities to acquire land for public purposes.
- Promote high quality residential development, including a broad spectrum of housing choices in both type and cost, the development of residential lots and an increase in residential building permit activity.

These changes have been incorporated into the revised priority goals which have been presented for adoption. The City Council is being asked to adopt the revised Priority Goals for the City of Elko New Market.

Attachments:

- Resolution 18-36 Adopting Priority Goals for the City of Elko New Market
- Priority Goals

CITY OF ELKO NEW MARKET
SCOTT COUNTY, MINNESOTA

RESOLUTION 18-36

**RESOLUTION ADOPTING PRIORITY GOALS
FOR THE CITY OF ELKO NEW MARKET**

WHEREAS, the City Council of Elko New Market (hereinafter referred to as “Council”) has completed a visioning and goal setting process; and,

WHEREAS, the Council has agreed upon the attached Priority Goals: and,

WHEREAS, the Goals will assist in allocating funds for the 2019 Budget; and,

WHEREAS, the adopted Vision Statement and Priority Goals will focus the Council, City Staff and Community on achieving results that align with Vision Statement and Priority Goals; and,

WHEREAS, the Vision Statement and Priority Goals are a continuous process and cannot become a reality without the support, participation, and commitment of the Council, City Staff and Community.

NOW, THEREFORE, BE IT RESOLVED, that the Council approves the Priority Goals attached here to as Exhibit A; and,

BE IT FURTHER RESOLVED, that City Staff be directed to communicate the Vision and Priority Goals to the Community.

APROVED AND ADOPTED by the City Council of Elko New Market this 28th day of June, 2018.

Robert Crawford, Mayor

ATTEST:

Sandra Green, City Clerk

Exhibit A

PRIORITY GOALS

- Develop a more diverse tax base, create more local employment opportunities and promote additional businesses and services within the community.
- Advance the “shovel ready” status of areas guided for commercial and industrial development through planning and where feasible, the procurement of supporting infrastructure.
- The acquisition of land for public purposes, including, but not limited to public utilities, library, parks and interchange rights-of-way. Position the City to take advantage of opportunities to acquire land for public purposes.
- Enhance the quality of life in the community through the improvement and expansion of the parks and trails system, recreational programming and cultural events.
- Promote high quality residential development, including a broad spectrum of housing choices in both type and cost, the development of residential lots and an increase in residential building permit activity.



STAFF MEMORANDUM

SUBJECT:	Outdoor Concerts and Events Permit Application
MEETING DATE:	June 28, 2018
PREPARED BY:	Sandra Green, City Clerk
REQUESTED ACTION:	Approve Resolution 18-37 Outdoor Concerts and Events Permit

COMMUNITY VISION:

- A mature growing freestanding suburb of the Twin Cities Metropolitan Area, preserving historic landmarks and small town character while providing suburban amenities and services, as well as full range of employment, housing, business, service, social, technology infrastructure and recreational opportunities for citizens and visitors
- Promote a diverse commercial base including light industrial and facilitating planned redevelopment which will be aesthetically pleasing with architectural standards that promotes quality development
- Provide a full range of municipal services to its residents. The City will allocate sufficient resources to meet the growing needs of the community
- A comprehensive park and trails system that will have sufficient facilities, play fields and open space to meet the needs of residents
- An effective and efficient transportation system, including access to the greater metropolitan area, transit opportunities, and improved connectivity to the interstate
- Provide community oriented local government and be financially sound, engaging in long-term financial planning to provide municipal services without undue burden on tax payers

5 YEAR GOALS:

- Diverse tax base, employment opportunities, additional businesses and services, promote high quality broad spectrum of residential development
- Advance "shovel ready" status of areas guided for commercial and industrial development
- Acquisition of land for public purposes, position City to take advantage of land acquisition opportunities
- Enhance quality of life through parks, trails, recreational programming and cultural events
- The development of residential lots and an increase in residential building permit activity

COMMUNITY ORIENTED LOCAL GOVERNMENT:

- Community Involvement
- Organizational Improvement
- Problem Solving
- Performance Measurement
- Professionalism

BACKGROUND:

Captain Black's Bar and Grill is requesting approval of an Outdoor Concerts and Events Permit for the following dates and times:

- Saturday, July 14 from 9:00 p.m. to 1:00 a.m.
- Saturday, August 18 from 9:00 p.m. to 1:00 a.m.
- Saturday, September 22 from 9:00 p.m. to 1:00 a.m.

Captain Black's Bar and Grill is requesting the Council approve an ending time of 1:00 a.m. for the above noted three events. City Code states that unless specified otherwise by the permit, no outdoor concert may be conducted between the hours of 10:00 p.m. and 8:00 a.m. In past years, the Council has approved several Outdoor Entertainment events at Captain Black's contingent on the ending time of 1:00 a.m. and the monitoring of the volume levels. The permits have been approved contingent on the adherence to the permit times and compliance with the City noise ordinance.

DISCUSSION:

Outdoor events held at this establishment in previous years have resulted in limited complaints with no valid complaints on record. Therefore, Staff would recommend approval of the Outdoor Concerts and Events Permit for Captain Black's Bar and Grill.

BUDGET IMPACT:

Minimal

Attachments:

- Resolution 18-37 Approving an Outdoor Concerts and Events Permit for Captain Black's

**CITY OF ELKO NEW MARKET
SCOTT COUNTY, MINNESOTA**

RESOLUTION NO. 18-37

WHEREAS; Sara Mahoney, Elko New Market has submitted an application for Outdoor Concerts and Event permits for Captain Black's Bar & Grill, located at 9660 Main Street, Elko New Market, Minnesota for the following dates and times:

- Saturday, July 14, 2018 from 9:00 p.m. to 1:00 a.m.
- Saturday, August 18, 2018 from 9:00 p.m. to 1:00 a.m.
- Saturday, September 22, 2018 from 9:00 p.m. to 1:00 a.m.

WHEREAS, the City Clerk reviewed the application and determined it meets the requirements of the City's Outdoor Concert and Event Ordinance and recommends approval of the permit;

NOW, THEREFORE, BE IT RESOLVED by the City Council of Elko New Market, Minnesota, that an Outdoor Concerts and Event permit be issued to Sara Mahoney for Captain Black's Bar & Grill, located at 9660 Main Street for the following dates and times:

- Saturday, July 14, 2018 from 9:00 p.m. to 1:00 a.m.
- Saturday, August 18, 2018 from 9:00 p.m. to 1:00 a.m.
- Saturday, September 22, 2018 from 9:00 p.m. to 1:00 a.m.

All events will be held in the rearyard of property. This permit is issued contingent upon Applicant's compliance with the above-approved time frames and the City's ordinances, including the outdoor concert and event ordinance and noise ordinance.

APPROVED AND ADOPTED this 28th day of June, 2018.

CITY OF ELKO NEW MARKET

By: _____
Robert Crawford, Mayor

ATTEST:

Sandra Green, City Clerk



STAFF MEMORANDUM

SUBJECT:	2018 Transfer of Funds
MEETING DATE:	June 28, 2018
PREPARED BY:	AEM Financial Solutions, Accounting Consultant
REQUESTED ACTION:	1. Approve Resolution 18-38 Transfer of Funds.

COMMUNITY VISION:

- A mature growing freestanding suburb of the Twin Cities Metropolitan Area, preserving historic landmarks and small town character while providing suburban amenities and services, as well as full range of employment, housing, business, service, social, technology infrastructure and recreational opportunities for citizens and visitors
- Promote a diverse commercial base including light industrial and facilitating planned redevelopment which will be aesthetically pleasing with architectural standards that promotes quality development
- Provide a full range of municipal services to its residents. The City will allocate sufficient resources to meet the growing needs of the community
- A comprehensive park and trails system that will have sufficient facilities, play fields and open space to meet the needs of residents
- An effective and efficient transportation system, including access to the greater metropolitan area, transit opportunities, and improved connectivity to the interstate
- Provide community oriented local government and be financially sound, engaging in long-term financial planning to provide municipal services without undue burden on tax payers

5 YEAR GOALS:

- Diverse tax base, employment opportunities, additional businesses and services, promote high quality broad spectrum of residential development
- Advance "shovel ready" status of areas guided for commercial and industrial development
- Acquisition of land for public purposes, position City to take advantage of land acquisition opportunities
- Enhance quality of life through parks, trails, recreational programming and cultural events
- The development of residential lots and an increase in residential building permit activity

COMMUNITY ORIENTED LOCAL GOVERNMENT:

- Community Involvement
- Organizational Improvement
- Problem Solving
- Performance Measurement
- Professionalism

BACKGROUND

The debt service of Fund 315 – 2015B Refunding GO Bond is funded in part by the Capital Project Fund along with the Fire Department Fund. The transfer of funds that was scheduled to take place in 2015-2017 did not occur, apparently due to turnover in personnel and unfamiliarity with the fund's source of revenue. As part of preparing for the 2017 audit, it was found that the transfers were not made. Staff is recommending the transfer of funds for the coverage of negative cash in the debt service fund. Debt service payments were made using the pooled cash of the City.

Staff did not identify that the transfers were not completed until the 2017 audit. The 315 Fund was a crossover refunding bond which was holding an escrow account to pay off the old bond at the call date of February 1st, 2017. During the follow-up after the crossover refunding, it was discovered that the balance of this Fund 315 – 2015B Refunding GO Bond was negative and the issue was examined further, discovering that transfers had not been completed.

DISCUSSION:

The City annually budgets for the transfer of funds to partially cover the debt service for Fund 315 – 2015B Refunding GO Bonds. The purpose of the transfer is to “buy down” the property tax impact of the debt service and help maintain a debt service levy “cap”. The Capital Projects Fund funds the activity. In addition, the Fire Department transfers into this fund in order to pick up their share of the ladder and pumper truck that were included in the bond back in 2008. With turnover in staff at the end of 2015, the transfer to cover the remaining debt service payments in the 2015B Refunding GO Bond Fund was not made during the 2015-2017 fiscal years, which caused a negative cash balance in this fund for the 2017 fiscal year audit. This was reviewed by staff during the 2017 audit and was determined that a clean—up transfer was is needed to occur during the 2018 fiscal year. Staff is recommending a transfer to the 2015B Refunding GO Bond Fund in the amount of \$105,142 of which \$96,642 will come from the Fire Department and \$8,500 will come from the Capital Projects Fund.

ACTION REQUESTED:

Approve Resolution 18-38 Transfer of Funds

Attachments:

Approve Resolution 18-38 Transfer of Funds

CITY OF ELKO NEW MARKET
SCOTT COUNTY, MINNESOTA

RESOLUTION NO. 18-38

RESOLUTION APPROVING A TRANSFER OF FUNDS

WHEREAS, as of December 31, 2017 the City has a balance in the Debt Service Funds that is negative.

WHEREAS, the City annually transfers unreserved funds from the Fire Department Fund and the Capital Projects Fund to designated Debt Service Funds in order to cover bond payments.

WHEREAS, City staff recommends a transfer of \$105,142 to Fund 315 (2015B Refunding GO Bonds).

NOW THEREFORE, BE IT RESOLVED, by the City Council of the City of Elko New Market, Minnesota, that \$105,142 be transferred into the 2015B Refunding GO Bond Fund from the following funds:

250 Capital Projects =	\$ 8,500.00
103 Fire Department =	<u>\$ 96,642.00</u>
TOTAL	\$ 105,142.00

ADOPTED by the Elko New Market City Council this 28 day of June 2018.

BY: _____
Robert Crawford, Mayor

ATTEST:

Sandra Green, City Clerk



**BOLTON
& MENK**

Real People. Real Solutions.

12224 Nicollet Avenue
Burnsville, MN 55337-1649

Ph: (952) 890-0509
Fax: (952) 890-8065
Bolton-Menk.com

MEMORANDUM

Date: June 28, 2018
To: Mayor Crawford and the Elko New Market City Council
Tom Terry, City Administrator
From: Rich Revering, PE – City Engineer
Subject: CSAHs 2 and 91 Roundabout Concept Design Report Acceptance
Elko New Market
Project No.: T43.115114

BACKGROUND

The City Council is being asked to accept the attached Concept Design Report for the proposed roundabout to be constructed in 2020 at the intersection of CSAHs 2 and 91 in Elko New Market.

DISCUSSION

The report documents the process and outcome of the concept design process and summarizes the findings of the Intersection Control Evaluation attached thereto. Since the council is familiar with the concept and outcome, no presentation of the report is planned. The project manager will be available at the meeting to respond to any questions or comments on the report.

RECOMMENDATION

Bolton & Menk, Inc. recommends the report be accepted and approved as attached.

End of Memo



Real People. Real Solutions.



CSAH 2 and CSAH 91

Concept Development Report

Elko New Market

Scott County, MN

Submitted by:

Bolton & Menk, Inc.
1960 Premier Drive
Mankato, MN 56001
P: 507-625-4171
F: 507-625-4177

EXECUTIVE SUMMARY

County State Aid Highway (CSAH) 2 and CSAH 91 are located in the City of Elko New Market, Scott County, MN, about two miles west of I-35. CSAH 2, an A-Minor Arterial locally known as Main Street, provides an east-west connection to I-35. CSAH 2 currently handles up to 9,200 vehicles per day (vpd) and is expected to carry 18,000 vpd in 2037. CSAH 91, a B-Minor Arterial locally known as Natchez Avenue, currently handles up to 4,050 vpd and is expected to carry 9,200 vpd in 2037.

Delays at the intersection of CSAH 2 and CSAH 91 are anticipated to increase in the next 10 years with the existing side-street stop traffic control. The expected increase in traffic volumes on CSAH 2 will reduce the number of gaps available and increase delays for the growing number of vehicles looking to enter onto or cross CSAH 2. A traffic operations analysis was completed to determine the appropriate traffic control and lane configuration for the intersection now and for the design year (2037). Multiple traffic control and lane configurations were reviewed for the intersection. The preliminary roundabout design shown below was selected as the best alternative to manage the expected increase in traffic and turning movement volumes.



The preliminary roundabout design mitigates potential traffic operations and safety issues associated with the expected traffic growth at this intersection. Specifically, the dual westbound approach and northbound bypass lane are necessary to accommodate the expected traffic volumes. The preliminary roundabout design should be constructed with the potential to expand (add lanes) for the westbound to southbound movement if traffic volumes increase more than what is currently expected.

Conceptual designs, along with estimated cost, were shared with the Elko New Market City Council for approval and input on various project elements.

Based on the considerations of the traffic analysis, financial impacts and council input, the Base Level Design and additional elements are recommended at the intersection of CSAH 2 and 91 and the surrounding area:

Concept	Construction Cost	Right-of-way Cost	+ Project Development and Delivery	Project Cost
Base Level Roundabout	\$1,992,000	\$0	\$408,000	\$2,400,000
+ Grading for Future Left Turn Lane	\$30,000	\$50,000	\$10,000	\$90,000
+ CSAH 91 Shared Use Path	\$145,000	\$0	\$30,000	\$175,000
+ CSAH 2 Shared Use Path	\$154,000	\$50,000	\$41,000	\$245,000
+ Continuous Acorn Lighting	\$485,000	\$0	\$95,000	\$580,000
+ Downtown Acorn Lighting	\$158,000	\$0	\$32,000	\$190,000
Total Cost	\$2,964,000	\$100,000	\$616,000	\$3,680,000

The above table shows the cost per individual item. Construction cost and project development and delivery of the additional elements could potentially be reduced were they included as part of the base level roundabout project.



Certification

CSAH 2 and CSAH 91 Corridor Study Report

Elko New Market,
Scott County, Minnesota

June 18th, 2018

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

By: _____
Aaron Warford, P.E.
License No. 46358

Date: _____

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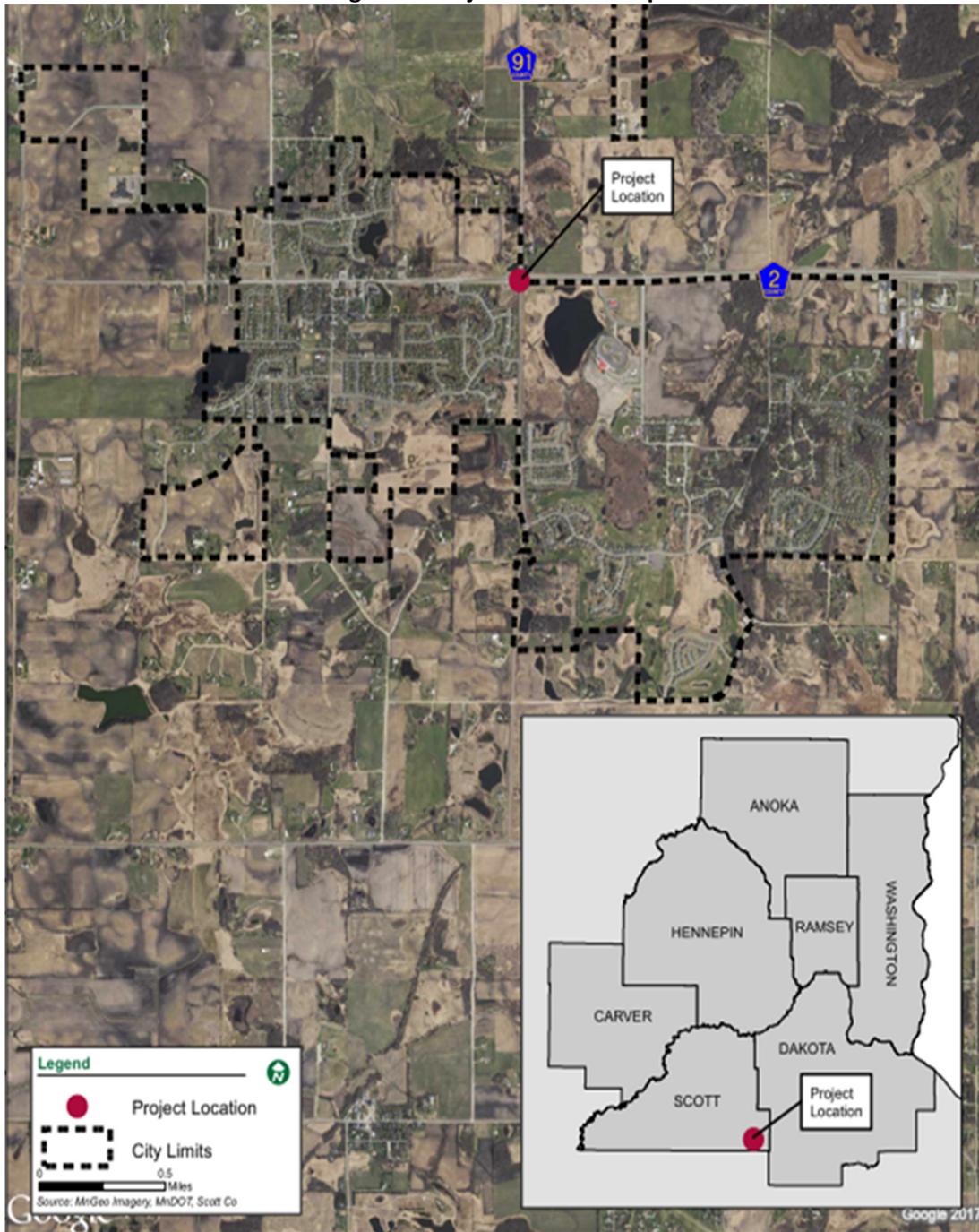
Appendix

- Appendix A: Traffic Analysis Report
- Appendix B: Cost Estimate
- Appendix C: Additional Element Details

I. INTRODUCTION

County State Aid Highway (CSAH) 2 at CSAH 91 in the City of Elko New Market is shown in **Figure 1**. CSAH 2 is a major east-west roadway that connects to I-35 two miles east of its intersection with CSAH 91. A potential development at the southeast quadrant of this intersection includes a gas station, a retail space and an office space. In addition to the proposed development, general growth is expected in the surrounding area that will impact traffic operations at this intersection. This report will address the traffic analysis, concept development and financial impacts.

Figure 1: Project Location Map



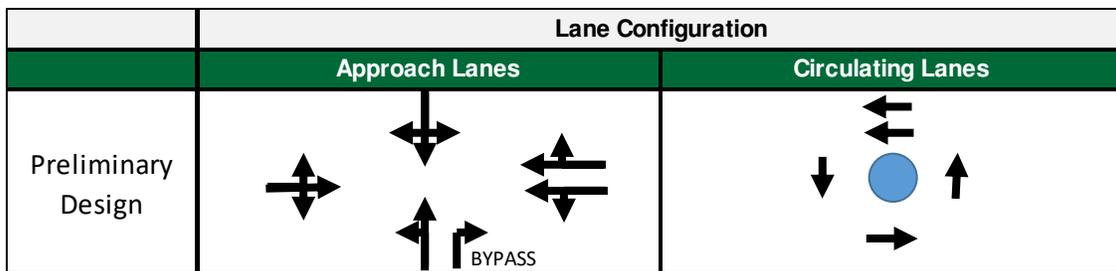
II. TRAFFIC ANALYSIS

The traffic analysis utilized traffic data collected in conjunction with the 2015 Traffic Impact Study completed by Spack Consulting. The future traffic volumes calculation incorporates the 2040 Scott County Transportation model and the most recent MnDOT Average Annual Daily Traffic (AADT). Additional traffic was included to account for potential development in the southeast quadrant of the intersection of CSAH 2 and CSAH 91.

Existing crash data from 2013-2015 indicates the intersection is operating within a normal range compared to other similar intersections statewide. However, the measures are approaching what is considered unsafe and should be monitored in the future.

Elevated delays are anticipated at the intersection of CSAH 2 and CSAH 91 in the next 10 years with the existing side-street stop traffic control. The expected increase in traffic volumes on CSAH 2 will reduce the number of gaps available and increase delays for the growing number of vehicles looking to enter onto or cross CSAH 2. A traffic operations analysis was completed to determine the appropriate traffic control and lane configuration for the intersection now and for the design year (2037). Multiple traffic control and lane configurations were reviewed for the intersection; a preliminary roundabout design with the following lane configuration is anticipated to operate sufficiently with forecasted 2037 peak hour turning movement volumes.

Figure 2: Preliminary Design Roundabout Lane Configuration



The preliminary roundabout design mitigates potential traffic operations and safety issues associated with the expected traffic growth at this intersection. Specifically, the dual westbound approach and northbound bypass lane are necessary to accommodate the expected traffic volumes. The preliminary roundabout design should be constructed with the potential to expand (add lanes) for the westbound to southbound movement if traffic volumes increase greater than what is currently expected.

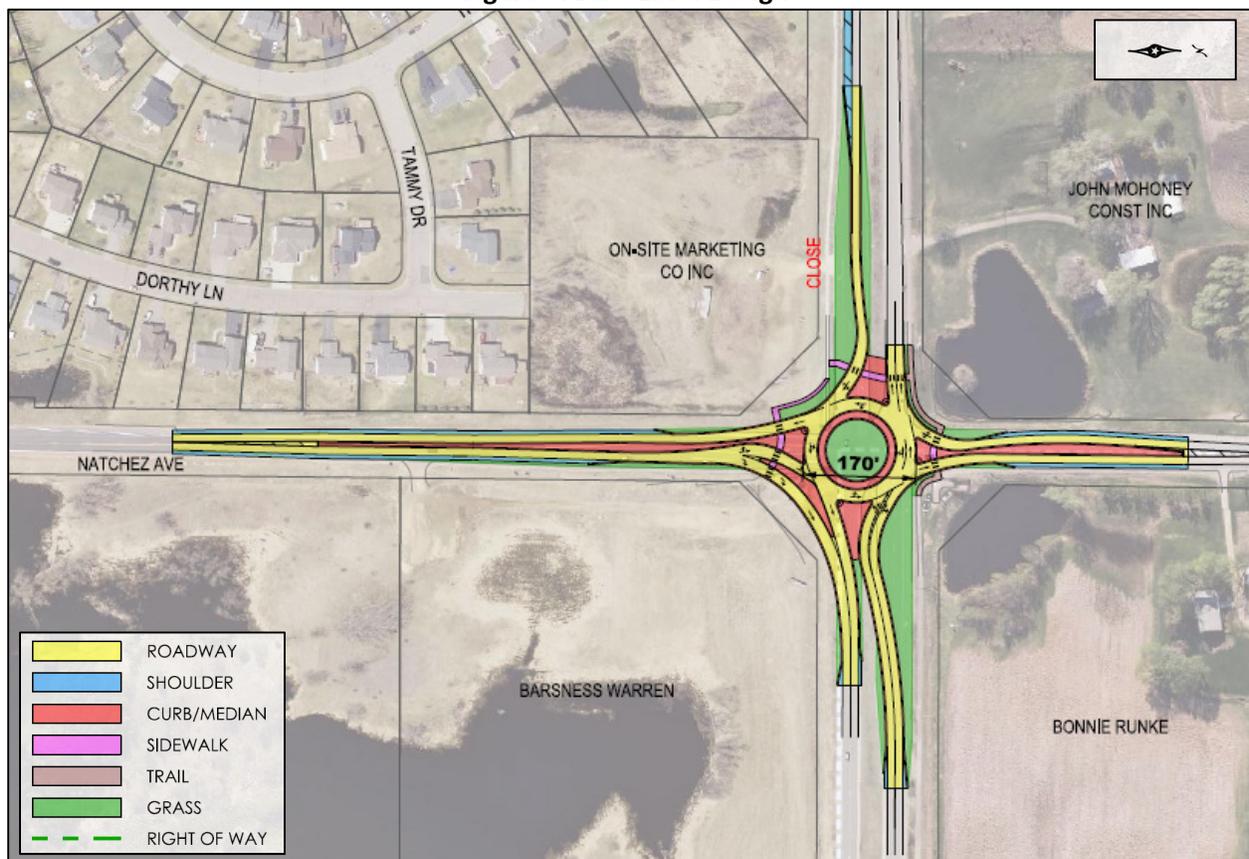
III. CONCEPT DEVELOPMENT AND FINANCIAL IMPACTS

The following sections detail the concept development and financial impacts for construction of a roundabout at the intersection of CSAH 2 and 91. The Base Level Design is designed to meet the current and forecasted traffic volumes needs and improve the safety at the intersection. Other items, including future development access considerations, median extensions, pedestrian accommodations, streetscaping, and lighting, are considered additional elements and are not essential to the operation of the roundabout, but could be include as part of this project. Cost estimate in sections A through D include construction and right-of-way cost but DO NOT include overhead or engineering cost. Construction and financial impacts of the additional elements have been separated from the Base Level Design cost. Cost estimate details are located in **Appendix B and C**.

A. Base Level Design (Preliminary Design Concept)

The Base Level Design is shown in **Figure 3** below. The geometric configuration for this design is described in Appendix A, Traffic Analysis Report, Section III.E.

Figure 3: Base Level Design



The Base Level Design includes a northbound bypass lane that separates traffic from the circulating lane with a raised median. The raised median clearly defines the lane designation and direction of travel for drivers. The northbound bypass lane and the eastbound through lane have separate exit lanes on the east side of the roundabout that match into the existing roadway. The northbound approach median begins approximately 730 feet south of the intersection.

The existing two westbound approach lanes continue through the roundabout. Drivers using the inside westbound lane are allowed to make left turns in the roundabout. The two exit lanes are reduced to one lane to the west of the roundabout, similar to the existing lane configuration.

The southbound and eastbound approaches are single lane. The southbound approach median begins approximately 400 feet north of the intersection allowing full access to the private driveway on CSAH 91 north of the intersection. Two eastbound lanes currently exist at the intersection. The outside eastbound lane is not needed with the Base Level Design roundabout, so it is removed approximately 450 feet west of the roundabout, and is striped as shoulder prior to the roundabout approach curb and gutter.

Pedestrian accommodations are provided across the north, west and south legs of the roundabout, with an option to include a crossing at the east leg if proven necessary in the future.

The City of Elko New Market, with Scott County serving as the sponsor for the City, has received Federal Highway Safety Improvement Program (HSIP) Funding in the amount of **\$1,992,000** to construct a roundabout at the intersection of CSAH 2 and 91. Additional elements could be included as part of the CSAH 2 and 91 roundabout project at an additional cost. The additional elements are described in the following sections.

B. Additional Roadway Improvement Opportunities

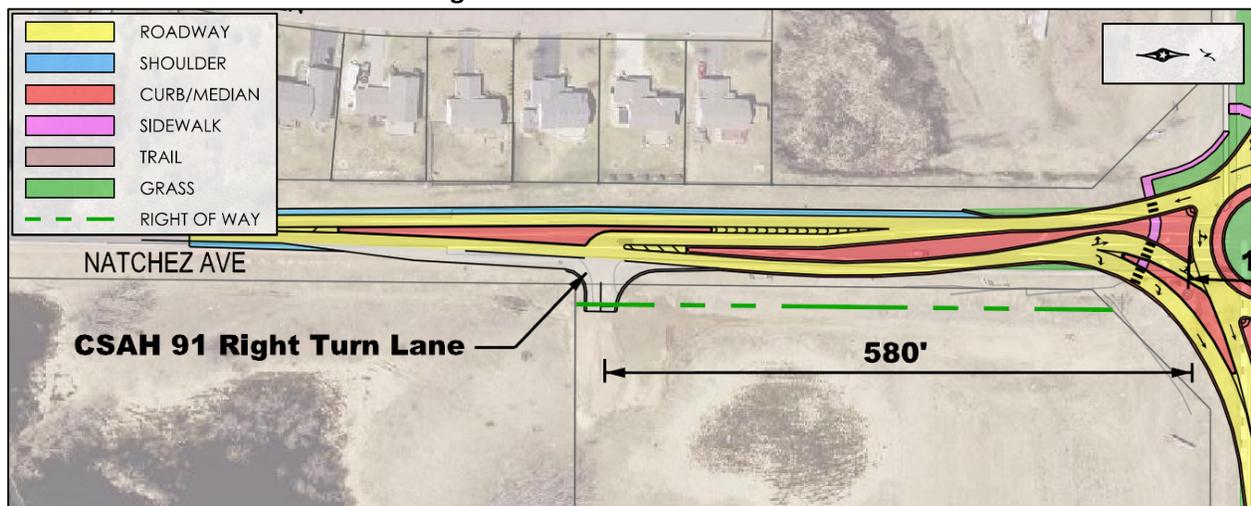
1. CSAH 91 Right Turn Lane

The southeast quadrant of the intersection is a potential development site. A right turn lane on CSAH 91 for northbound traffic is estimated to cost **\$45,000**. The right turn lane is not considered integral to the roundabout and could be added in the future when the property develops. The CSAH 91 Right Turn Lane is shown in **Figure 4**.

2. CSAH 91 Left Turn Lane

The CSAH 91 Left Turn Lane concept allows partial access to the development site at the southeast quadrant with a channelized left turn lane. The CSAH 91 Left Turn Lane is also shown in **Figure 4**:

Figure 4: CSAH 91 Left Turn Lane



The CSAH 91 Left Turn Lane is not considered integral to the roundabout but the inclusion of a left turn lane should be considered during design. The CSAH 91 Left Turn Lane Concept has a wider roadway footprint and wider median than the Base Level Design. Grading and base preparation for the wider footprint can be completed without construction of the left turn lane. The cost estimate to grade for a future left turn lane is **\$30,000**. Grading for the left turn lane would require additional right-of-way of the southeast quadrant property. Estimated right-of-way acquisition is **\$49,500**.

If the left turn lane is desired in the future, it can be added at an additional cost but with less disruption to the current road at that time.

3. CSAH 91 Median Extension

Extending the northbound approach median to the south will improve the pedestrian crossing safety at Aaron Drive and the roundabout. The median and curb provide a pedestrian refuge area at Aaron Drive and create a traffic calming effect, passively reducing speeds prior to the roundabout. The CSAH 91 Median Extension is shown in **Figure 5**:

Figure 5: CSAH 91 Median Extension



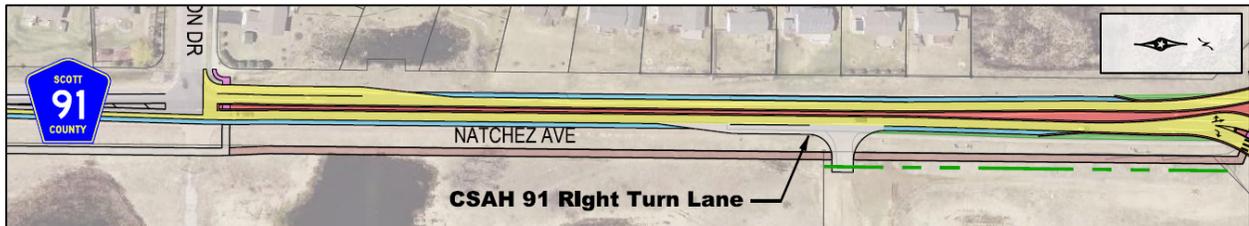
The CSAH 91 Median Extension can be added to the Base Level Design with or without the CSAH 91 Left Turn Lane option. The median extension requires widening of the existing roadway and base material. The additional cost of the median extension is estimated at **\$220,000**.

C. Additional Pedestrian Accommodation Opportunities

1. CSAH 91 Shared Use Path

The CSAH 91 Shared Use Path connects the existing trail on CSASH 91 to the roundabout. **Figure 6** shows the CSAH 91 Shared Use Path connection.

Figure 6: CSAH 91 Shared Use Path



The CSAH 91 Shared Use Path can be added to the Base Level Design along with any of the other add-on concepts (**Figure 6** shows the shared use path along with the CSAH 91 Median Extension). The CSAH 91 Shared Use Path connection is estimated to cost **\$91,000**. The shared use path requires the same additional right-of-way needed for the CSAH 91 Left Turn Lane concept. If the CSAH 91 Shared Use Path connection is added to the Base Level Design, estimated right-of-way acquisition is **\$49,500**.

2. CSAH 2 Shared Use Path

The CSAH 2 Shared Use Path connects the roundabout to the existing trail on France Ave to the east of CSASH 91. **Figure 7** shows the CSAH 2 Shared Use Path connection.

Figure 7: CSAH 91 Shared Use Path

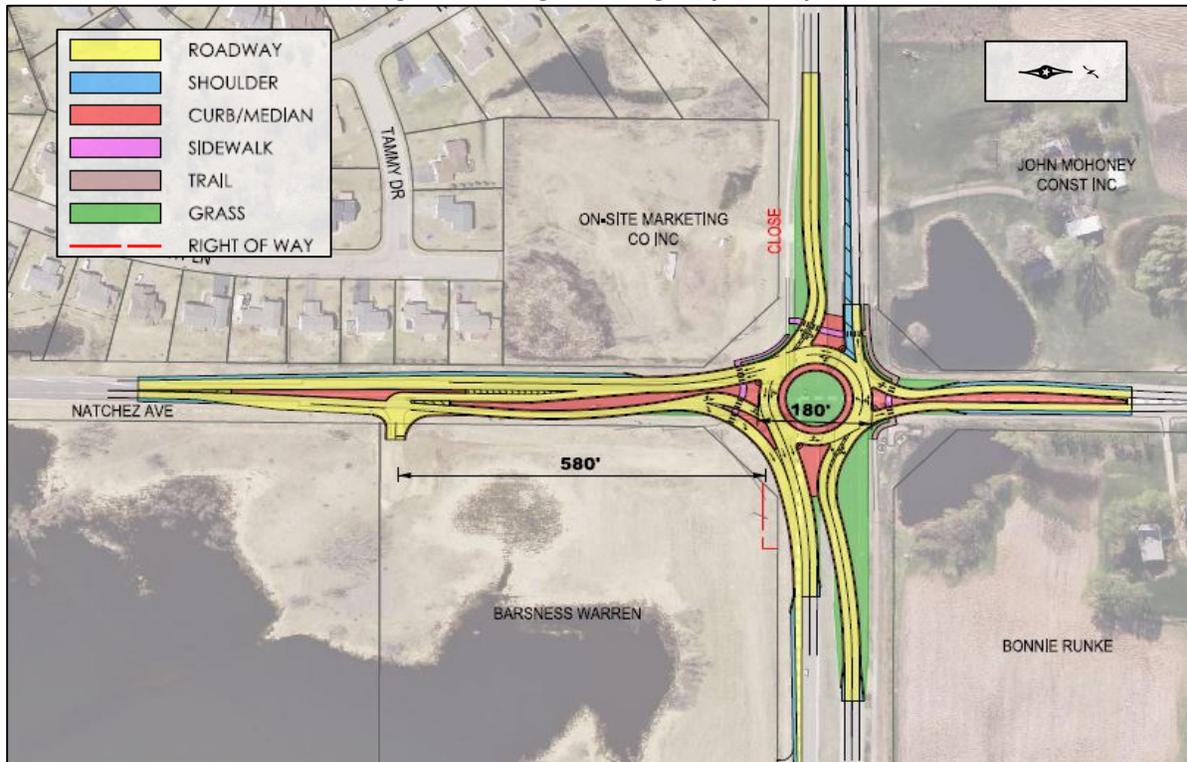


The CSAH 2 Shared Use Path can be added to the Base Level Design along with any of the other add-on concepts. The CSAH 2 Shared Use Path connection is estimated to cost **\$154,000**. The shared use path requires additional right-of-way from the southeast quadrant property. Estimated right-of-way acquisition is **\$49,500**.

D. Design Contingency Concept

The Design Contingency Concept, shown in **Figure 8** below, includes the geometric configuration described in Appendix A, Traffic Analysis Report, Section III.G. The concept is an expansion of the Base Level Design roundabout that can be implemented in the future if traffic volumes change or increase from the current assumptions. The Design Contingency concept should not be implemented unless it is proven necessary in the future.

Figure 8: Design Contingency Concept



The Design Contingency Concept is designed to expand the Base Level Design roundabout with minimal impacts. Additional approach lanes, exit lanes, acceleration lanes and circulating lanes can be added to the roundabout in the future to increase the capacity if needed.

In this concept, the westbound approach lanes are repurposed to allow left turns from both lanes. Consequently, an additional circulating lane is added to the west side of the center circle and an additional exit lane is added to the south leg of the roundabout. The southbound lanes can be reduced to one lane approximately 500 feet south of the roundabout.

An additional eastbound approach lane requires an additional circulating lane for the south side of the center circle. The additional circulating lanes to the west and south sides of the center circle are added by reducing the median size. The northbound bypass lane requires an acceleration lane to maintain the lane separation between eastbound through moving vehicles and northbound right turning vehicles.

The cost estimate for the Design Contingency expansion is **\$338,000**. The northbound bypass lane requires grading easements. Estimated cost for the easement acquisition is **\$3,000**.

E. Additional Streetscape and Lighting Opportunities

Additional opportunity examples and cost estimates are detailed in **Appendix C**.

Improvement opportunities include:

- Continuous Lighting – The Base Level Design concept includes cost for basic roundabout lighting. However, various types and coverage of lighting are evaluated from mostly functional lighting to highly decorative alternatives. Additionally, an option for downtown lighting is evaluated. Lighting costs range from **\$150,000 to \$800,000+**. Lighting options can be done separately from the roundabout project, but potential underground utilities should be considered during design.

- 
- Roundabout Enhancements – These vary from simple plantings and landscaping to hardscape features. These elements would be best accomplished during the roundabout project, but could be done separately. Roundabout enhancement costs range from **\$45,000 to \$105,000**.
 - Landscaping (not including roundabout) – These elements can be done separately from the roundabout project. Scott County is currently working on a landscaping policy that would impact the allowed landscaping for the project area. Landscaping costs range from **\$75,000 to \$150,000**.
 - Monuments - These elements can be done separately from the roundabout project. Monuments vary from simple entry monuments to highly customized monuments. Monument costs range from **\$20,000 each to \$60,000+ each**.
 - Pavement Treatment – These should be completed with the roadway improvements. Pavement treatments include decorative scoring, stamped and/or colored pavements and paver options. Pavement treatment costs range from **\$120,000 to \$380,000**.
 - Site Furnishing and Amenities - These elements include pole banners and benches and can be done separately from the roundabout project depending on location. Site furnishing and amenities costs range from **\$55,000 to \$145,000**.

IV. ELKO NEW MARKET COUNCIL MEETING

The CSAH 2 and 91 Base Level Design roundabout concept and additional elements were presented to the Elko New Market City Council. The Council was asked to endorse the roundabout design and provide direction on whether to perform further design and analysis on the various additional elements. The results of this discussion are shown in **Table 1**.

Table 1: Elko New Market City Council Additional Element Selection

Element	Include?
Base Roundabout	Yes
Left Turn Grading ¹	Yes
Left Turn Lane ¹	No
Median Extension to Aaron Drive	No
CR 91 Shared Use Path Connection	Yes
CSAH 2 Shared Use Path Connection	Yes
Continuous Lighting (Acorn)	Yes
Downtown Lighting (Acorn, Enhanced)	Yes
Roundabout Enhancements ²	Maybe
Landscaping	Maybe
Monuments	No
Pavement Treatments	No
Site Furnishings/Amenities	No

Additional details regarding the additional elements can be found in **Appendix C**.

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the considerations of the traffic analysis, financial impacts and City Council input, the Base Level Design and additional elements are recommended at the intersection of CSAH 2 and 91 and the surrounding area. **Table 2** identifies the cost estimate for each individual item.

Table 2: Recommended Elements and Cost

Concept	Construction Cost	Right-of-way Cost	+ Project Development and Delivery	Project Cost
Base Level Roundabout	\$1,992,000	\$0	\$408,000	\$2,400,000
+ Grading for Future Left Turn Lane	\$30,000	\$50,000	\$10,000	\$90,000
+ CSAH 91 Shared Use Path	\$145,000	\$0	\$30,000	\$175,000
+ CSAH 2 Shared Use Path	\$154,000	\$50,000	\$41,000	\$245,000
+ Continuous Acorn Lighting	\$485,000	\$0	\$95,000	\$580,000
+ Downtown Acorn Lighting	\$158,000	\$0	\$32,000	\$190,000
Total Cost	\$2,964,000	\$100,000	\$616,000	\$3,680,000

Construction costs, project development and delivery of the additional elements can be potentially reduced if they are included as part of the base level roundabout project.

Appendix A: Traffic Analysis Report

I. EXISTING CONDITIONS AND ANALYSIS

CSAH 2 is classified as an A-Minor Arterial locally known as Main Street. CSAH 2 provides an east-west connection to I-35 for the City of Elko New Market and Scott County. At the intersection with CSAH 91, CSAH 2 is a four-lane divided highway with left and right turn lanes. CSAH 2 currently handles 9,200 vehicles per day (vpd) east of CSAH 91 and 6,400 vpd west of CSAH 91 (MnDOT data, 2014). The speed limit on CSAH 2 is 55 miles per hour (mph).

CSAH 91 is classified as a B-Minor Arterial locally known as Natchez Avenue. The north-south connection intersects CSAH 2 as a two-lane, rural section highway with left and right turn lanes. Traffic on CSAH 91 is required to stop at this intersection. CSAH 91 currently handles 4,050 vpd south of CSAH 2 and 1,050 vpd north of CSAH 2 (MnDOT data, 2013). The speed limit on CSAH 91 is 55 mph.

A. Data Collection

The corridor and intersection analysis utilized traffic data collected in conjunction with the 2015 Traffic Impact Study (TIS) completed by Spack Consulting. The 48-hour turning movement count at the CSAH 2 and CSAH 91 is sufficient for evaluation and is a representative of current traffic volumes. The following peak hours were established for analysis of the corridor:

AM peak	6:30 am to 7:30 am
PM peak	4:30 pm to 5:30 pm

Most recent Average Annual Daily Traffic (AADT) data was collected from MnDOT. AM and PM peak hour turning movement volumes and AADTs are included on the figures in **Appendix A-1**.

B. Safety Analysis

Three year crash data (2013-2015) was analyzed as part of the Highway Safety Improvement Program (HSIP). There were seven recorded crashes at this intersection between 2013 and 2015. Five of the seven crashes involved injuries, four of the five injury crashes involved right angle crashes. In the three year data period, the intersection of CSAH 2 and CSAH 91 has a Critical Crash Index of 0.90 and a Critical Severity Index of 0.94. These measures indicate that the intersection is operating within a normal range (critical index <1.0) when compared to other similar intersections statewide, however, the indices are approaching what is considered unsafe and should be monitored in the future.

The City of Elko New Market provided additional crash data for all crashes after 2015. Eight additional crashes were reported from the start of 2016 to September of 2017. Full crash details were not available, but it is known that three of the eight crashes since 2015 resulted in injury.

Crash data are found in **Appendix A-2**.

C. Warrant Analysis

National guidelines for traffic signal warrants have been developed to promote continuity of traffic control devices and to ensure traffic signals are installed at intersections that benefit from their use. A traffic signal is not warranted based on the 2015 count data.

Warrant analysis results are found in the **Appendix A-3**.

D. Operational Analysis

The traffic operation analysis for the intersection included an evaluation of existing intersection delay and Level of Service (LOS). LOS results are described using letters

ranging from A to F. These letters serve to describe a range of operating conditions for different types of facilities. Levels of Service are calculated based on the 2010 Highway Capacity Manual (HCM), which defines the LOS, based on control delay. Control delay is the delay experienced by vehicles slowing down as they are approaching the intersection, the wait time at the intersection, and the time for the vehicle to speed up through the intersection and enter into the traffic stream. The average intersection control delay is a volume weighted average of delay experienced by all motorists entering the intersection on all intersection approaches. The control delay is modeled within the analysis software, Trafficware Synchro and SimTraffic. LOS D is commonly taken as an acceptable design year LOS.

Existing 2015 peak hour turning movement counts were used to model the intersection to determine existing traffic operations. **Table 1** shows the results of the existing traffic operations analysis. All traffic operations result details can be found in **Appendix A-4**.

Table 1. Existing Traffic Operational Analysis – CSAH 2 and CSASH 91

	AM					PM				
	A pproach			Overal		A pproach			Overal	
	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
Existing Conditions										
CSAH 2 WB	1	A	0	3.2	A	2.3	A	0	4.4	A
CSAH 91 SB	11.3	B	1			34.9	D	3		
CSAH 2 EB	0.9	A	0			1.1	A	0		
CSAH 91 NB	6.1	A	4			10.2	B	2		

The following summarizes the Existing Traffic Operations results:

- The intersection is currently operating at LOS A during the peak hours.
- The southbound approach is operating at a LOS D during the PM peak hour. The southbound traffic on CSAH 91 occasionally has trouble finding sufficient gaps in the westbound traffic to safely perform a crossing maneuver. Southbound traffic currently accounts for less than 5% of the total PM peak hour traffic entering the intersection. Southbound delay and queue lengths would be expected to increase as traffic volumes increase in the future.
- The northbound approach is operating at a LOS A during the AM peak hour. The northbound approach currently accounts for nearly 40% of the entering traffic during the AM peak hour. With the current stop control, the northbound delay and queue lengths would be expected to increase significantly as traffic volumes increase in the future.

II. TRAFFIC FORECASTING

A. Trip Generation

The analysis completed for this report utilized trip generation analysis completed in conjunction with the 2015 Traffic Impact Study (TIS) Commercial/Office Development, CSAH 2 & CSAH 91, Elko New Market, Minnesota completed by Spack Consulting. The analysis accounted for the addition of a gas station with convenience market and carwash, a special retail space and an office space in the southeast quadrant of the CSAH 2 and CSAH 91 intersection. Pass-by trips and internal trips were considered and the distribution of new traffic was based on existing traffic patterns.

B. Traffic Forecasting

Additional traffic growth is expected to account for other developments in the study area.

Growth rates were calculated for each leg of the intersection using the most recent MnDOT AADT volumes and the 2040 Scott County Transportation Model. Table 2 details the most recent MnDOT AADT and growth rate used to calculate the 2027 and 2037 forecasted AADT. The 2027 and 2037 forecasted traffic volumes are shown along with the Scott County Transportation Plan Model AADT's for comparison.

Table 2: Forecasted AADT

Street	Leg	Mndot Most Recent AADT		Growth Rate	Forecasted Volumes		Scott County Trans. Plan AADT
		AADT	Year		2027	2037	2040
CSAH 2	East	9200	2014	2.97%	13500	18000	19700
	West	6400	2014	1.41%	7700	8800	9200
CSAH 91	South	4050	2013	3.47%	6500	9200	11700
	North	1050	2013	5.39%	2200	3700	4333

Traffic forecasts indicate volumes on the east and south legs of the intersection are expected to approximately double by 2037. Volumes on the north leg are expected to increase over 3.5 times by 2037. The Scott County Transportation Plan AADT for the north leg was estimated based on the available data on CSAH 91 north of 230th Street in Scott County. Growth rates were applied to the existing turning movement counts to develop forecasted turning movement counts for the peak hours. The trips generated from the proposed development in the southeast quadrant of the CSAH 2 and CSAH 91 intersection were also added to the forecasted traffic volumes. Existing, 2027, and 2037 AADT volumes and turning movements are detailed in **Appendix A-1**.

C. Future Traffic Warrant Analysis

Signal and All-Way Stop Control (AWSC) warrants were completed using the existing, 2027 and 2037 traffic volumes according to guidelines set out in the Minnesota MUTCD. The signal warrant results shown in **Table 3** do not include the minor street right turning volumes. This is typical practice for signal warrants because it is expected that the minor street right turns can navigate the mainline traffic to perform the right turn. The AWSC warrant results shown in **Table 4** include the minor street right turning volume because all traffic would be expected to stop at all times. Typically, a roundabout can be considered justified if traffic volumes warrant a traffic signal and AWSC.

Table 3: Signal Warrant Analysis Results

Warrant	Required Hrs	2015 Volumes	2027 Forecast	2037 Forecast
1A	8	0	0	1
1B	8	0	1	8
2	4	0	0	4
3	1	0	0	2

Table 4: All-Way Stop Control Warrant Analysis Results

Warrant	Required Hrs	2015 Volumes	2027 Forecast	2037 Forecast
AWSC	8	8	15	16

When the minor street right-turn movements are eliminated, the existing and 2027 forecasted volumes do not meet signal warrants. Warrant 1B and warrant 2 are met with the 2037 forecasted traffic volumes. AWSC warrants are met with the existing, 2027 and 2037 forecasted traffic volumes.

III. FUTURE TRAFFIC OPERATIONS ANALYSIS

The preliminary design concept was developed in part from the future traffic operations analysis. The AM and PM peak hour 2027 and 2037 forecasted turning movement counts were used to analyze different options for the intersection of CSAH 2 and CSAH 91. The following sections document the analysis completed for the CSAH 2 and CSAH 91 intersection.

A. No Build Analysis

Table 5 shows the results of the future traffic operations analysis with the existing geometry and traffic control at CSAH 2 and CSAH 91. Northbound and southbound traffic were required to stop at CSAH 2.

In general, the existing geometry and control do not provide sufficient operations for the northbound and southbound approaches or the westbound left turning movement.

Table 5: 2027 and 2037 No Build

	AM					PM				
	Approach			Overall		Approach			Overall	
	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
2027 No Build										
CSAH 2 WB	2.6	A	0	11	B	5.7	A	8	133	F
CSAH 91 SB	26.9	D	3			2040	F	55		
CSAH 2 EB	16	A	0			1.8	A	1		
CSAH 91 NB	20.4	C	12			506	F	34		
2037 No Build										
CSAH 2 WB	3.6	A	3	513	F	19.9	C	23	148.7	F
CSAH 91 SB	81.6	F	8			3459	F	45		
CSAH 2 EB	2	A	1			2.2	A	1		
CSAH 91 NB	114.5	F	24			1244	F	32		

The following summarizes the future traffic operations results with no changes to the geometry and traffic control:

- The intersection is anticipated to have LOS F during the PM peak hour with the 2027 forecasted traffic volumes.
- The intersection is anticipated to have LOS F during both peak hours with the 2037 forecasted traffic volumes.
- Northbound and southbound traffic is expected to have LOS F with the current geometry and traffic control with the forecasted traffic volumes.
- Westbound traffic, specifically the westbound left turning movement is expected to have an increase in delay and queueing with the forecasted traffic volumes.

B. Signalized Intersection

Table 6 shows the results of the future traffic operations analysis with a signalized traffic control at CSAH 2 and CSAH 91. The westbound left turning lane was analyzed as a single lane and a dual lane; it is typical to consider a dual left turning lane when turning volumes exceed 300 vehicles per hour. The dual westbound left turning lanes would require widening CSAH 91 south of the intersection to include two southbound exit lanes. The signalized control was only analyzed with the 2037 forecasted traffic volumes because it was determined that a signal was not the optimal control for the intersection.

In general, the signalized control does not provide enough capacity for the eastbound approach with the forecasted traffic volumes.

Table 6: 2037 Signalized

	AM					PM				
	Approach			Overall		Approach			Overall	
	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
2037 Singal - Single WBL Turn Lane										
CSAH 2 WB	8.5	A	4	54.8	E	15.2	B	16	64.4	E
CSAH 91SB	12.4	B	3			27.8	C	6		
CSAH 2 EB	161.6	F	26			344	F	24		
CSAH 91NB	12.6	B	12			6.7	A	2		
2037 Singal - Dual WBL Turn Lane										
CSAH 2 WB	8.3	A	3	48.6	D	9.7	A	5	53.1	E
CSAH 91SB	13.6	B	3			12.2	B	2		
CSAH 2 EB	138.4	F	23			305.6	F	24		
CSAH 91NB	13.5	B	13			4.2	A	2		

The following summarizes the future traffic operations results with a signalized control:

- The intersection is anticipated to have LOS D or E during the AM and PM peak hours with the 2037 forecasted traffic volumes with both options.
- The eastbound approach is anticipated to have LOS F during the AM and PM peak hours with the 2037 forecasted traffic volumes with both options. Eastbound delays would be expected to exceed 5 minutes during the PM peak hour.

C. Single Lane Roundabout

Table 7 shows the results of the future traffic operations analysis with a single lane roundabout at CSAH 2 and CSAH 91.

In general, the single lane roundabout does not provide enough capacity for the westbound and northbound approaches.

Table 7: 2027 and 2037 Single Lane Roundabout

		Lane Configuration									
		Approach Lanes					Circulating Lanes				
Single Lane Roundabout											
		Traffic Operations									
		AM					PM				
		Approach			Overall		Approach			Overall	
		Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
		2027 Single Lane Roundabout									
CSAH 2 WB		4.9	A	1	17.8	C	30.7	D	17	23.3	C
CSAH 91SB		4.1	A	0			13.7	B	1		
CSAH 2 EB		7.7	A	2			11.4	B	2		
CSAH 91NB		32.1	E	11			6.4	A	1		
		2037 Single Lane Roundabout									
CSAH 2 WB		6.3	A	2	89.8	F	137	F	52	96.9	F
CSAH 91SB		5	A	0			37.2	E	4		
CSAH 2 EB		10.5	B	4			25.4	D	5		
CSAH 91NB		185	F	39			8.5	A	2		

The following summarizes the future traffic operations results with a single lane roundabout:

- The intersection is anticipated to have LOS F with the 2037 forecasted traffic volumes.
- The northbound approach, specifically the northbound right turning movement, is anticipated to have LOS F during the AM peak hour with the 2037 forecasted traffic volumes and LOS E with the 2027 forecasted traffic volumes.
- The westbound approach, specifically the westbound left turning movement, is anticipated to have LOS F during the PM peak hour with the 2037 forecasted traffic volumes and LOS D with the 2027 forecasted traffic volumes.
- Southbound and eastbound approaches are anticipated to have LOS E and D, respectively, during the PM peak hour with the 2037 forecasted traffic volumes.

D. Single Lane Roundabout with Northbound Bypass Lane

Table 8 shows the results of the future traffic operations analysis with a single lane roundabout with a northbound bypass lane at CSAH 2 and CSAH 91.

In general, the single lane roundabout with a northbound bypass lane does not provide enough capacity for the westbound approach.

Table 8: 2027 and 2037 Single Lane Roundabout with NB Bypass Lane

		Lane Configuration									
		Approach Lanes					Circulating Lanes				
Roundabout with NB Bypass Lane											
	Traffic Operations										
		AM					PM				
		Approach			Overall		Approach			Overall	
		Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
2027 Add Northbound Bypass											
CSAH 2 WB	4.9	A	1	3.8	A	30.7	D	17	22.6	C	
CSAH 91SB	4.1	A	0			13.7	B	1			
CSAH 2 EB	7.7	A	2			11.4	B	2			
CSAH 91NB	0.5	A	1			1	A	0			
2037 Add Northbound Bypass											
CSAH 2 WB	6.3	A	2	4.8	A	137	F	52	95.9	F	
CSAH 91SB	5	A	0			37.2	E	4			
CSAH 2 EB	10.5	B	4			25.4	D	5			
CSAH 91NB	0.6	A	1			0.9	A	0			

The following summarizes the future traffic operations results with a single lane roundabout with a northbound bypass lane:

- The intersection is anticipated to have LOS F during the PM peak hour with the 2037 forecasted traffic volumes.
- The northbound bypass lane improves the northbound approach during the AM peak hour from LOS F to LOS A with the 2037 forecasted traffic volumes and from LOS E to LOS A with the 2027 forecasted traffic volumes.
- The westbound approach, specifically the westbound left turning movement, is anticipated to have LOS F during the PM peak hour with the 2037 forecasted traffic volumes and LOS D with the 2027 forecasted traffic volumes.
- Southbound and eastbound approaches are anticipated to have LOS E and D, respectively, during the PM peak hour with the 2037 forecasted traffic volumes.

E. Preliminary Design Roundabout Analysis

Table 9 shows the results of the future traffic operations analysis with the preliminary design roundabout at CSAH 2 and CSAH 91. The preliminary design roundabout includes a northbound bypass lane and two westbound approaches.

In general, the preliminary design roundabout provides sufficient operations for all approaches of the intersection.

Table 9: 2027 and 2037 Preliminary Roundabout Design

Lane Configuration										
	Approach Lanes					Circulating Lanes				
Preliminary Design										
Traffic Operations										
	AM					PM				
	Approach			Overall		Approach			Overall	
	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
2027 Build - Roundabout										
CSAH 2 WB	3.8	A	0	3.8	A	7.5	A	3	7.6	A
CSAH 91SB	3.9	A	0			10.5	A	1		
CSAH 2 EB	8.1	A	2			12.1	A	2		
CSAH 91NB	0.5	A	1			1	A	0		
2037 Build - Roundabout										
CSAH 2 WB	4.3	A	1	4.4	A	10	B	5	11.8	B
CSAH 91SB	4.5	A	0			20.8	C	3		
CSAH 2 EB	10.5	B	4			25.4	D	5		
CSAH 91NB	0.6	A	2			0.9	A	0		

The following summarizes the future traffic operations results with the preliminary design roundabout:

- The intersection is anticipated to have LOS A or B during the peak hours with the forecasted traffic volumes.
- All approaches are anticipated to have LOS A with the 2027 forecasted traffic volumes.
- The dual westbound approach is necessary to facilitate the westbound through and left turning volumes anticipated during the PM peak hour.
- The northbound right bypass lane is necessary to facilitate the northbound right turning movement anticipated during the AM peak hour. The northbound right bypass lane, along with the single eastbound approach lane, match into the existing two eastbound lanes. Having exclusive lanes for the eastbound through movement and northbound right movement is essential to the operation of the roundabout.
- The worst approach delay of LOS D is the eastbound approach with the 2037 forecasted traffic volumes.

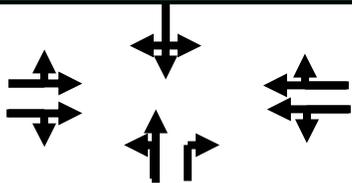
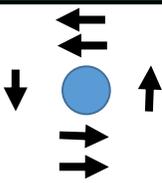
- The maximum 95th percentile queue is anticipated to be 5 vehicles for the westbound and eastbound approaches during the PM peak hour with the 2037 forecasted traffic volumes.

F. Dual Eastbound and Westbound Approach Roundabout Analysis

Table 10 shows the results of the future traffic operations analysis for a roundabout with dual eastbound and westbound approaches at CSAH 2 and CSAH 91.

In general, the dual eastbound lanes negatively affect the northbound approach as the northbound right turning vehicles have to share an exit lane with the eastbound through moving vehicles in the eastbound outside lane.

Table 10: 2027 and 2037 Dual Eastbound and Westbound Approach Roundabout

	Lane Configuration									
	Approach Lanes					Circulating Lanes				
Dual EB and WB Approach										
Traffic Operations										
AM										
PM										
Approach			Overall		Approach			Overall		
Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	
2027 Dual Eastbound and Westbound										
CSAH 2 WB	3.7	A	1	9.3	A	7.3	A	3	7.1	A
CSAH 91SB	3.8	A	0			10.2	B	1		
CSAH 2 EB	4.8	A	1			6.9	A	1		
CSAH 91NB	15.4	C	6			5	A	1		
2037 Dual Eastbound and Westbound										
CSAH 2 WB	4.2	A	1	33.1	D	9.7	A	4	10.1	B
CSAH 91SB	4.4	A	0			19.9	C	3		
CSAH 2 EB	5.6	A	1			10.2	B	1		
CSAH 91NB	65.1	F	21			6.2	A	1		

The following summarizes the future traffic operations results for a roundabout with dual eastbound and westbound approaches:

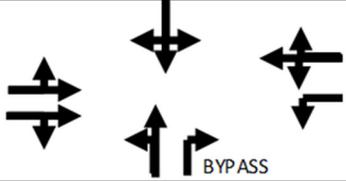
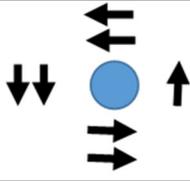
- The northbound approach, specifically the northbound right turning movement, is anticipated to have LOS F during the AM peak hour with the 2037 forecasted traffic volumes as a result of sharing the exit lane with the eastbound through movement.

G. Design Contingency Analysis

Table 11 shows the results of the future traffic operations analysis for the design contingency roundabout at CSAH 2 and CSAH 91.

In general, reallocating the westbound lanes, adding a westbound circulating lane, and adding an eastbound lane increases the capacity of the roundabout.

Table 11: 2037 Design Contingency

Lane Configuration										
	Approach Lanes					Circulating Lanes				
Design Contingency										
Traffic Operations										
	AM					PM				
	A pproach			Overall		A pproach			Overall	
	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS	Delay (s)	LOS	95% Queue (Veh)	Delay	LOS
2037 Design Contingency										
CSAH 2 WB	4.4	A	1	3	A	10.1	B	5	9.8	A
CSAH 91 SB	4.5	A	0			20.8	C	3		
CSAH 2 EB	5.9	A	1			10.6	B	1		
CSAH 91NB	0.5	A	2			0.8	A	0		

The following summarizes the future traffic operations results with the design contingency roundabout:

- The intersection is anticipated to have LOS A during the peak hours with the forecasted traffic volumes.
- All approaches are anticipated to have LOS C or better with the 2037 forecasted traffic volumes.

H. Development Access Analysis

The development access was analyzed with a right-in/right-out only intersection at the East Access to CSAH 2 and a full access intersection at the South Access to CSAH 91. Both intersections were analyzed assuming turn lanes would be included to remove turning traffic from the through lanes. Tables 1 and Tables 5-11 detail the approach delay at the intersection of CSAH 2 and CSAH 91; **Table 12** details the overall, highest delay movement (limiting movement) and maximum approach queues for the development access intersections with the 2037 forecasted traffic volumes. The highest delay movement is more significant for this analysis because of the relative difference between the through movements on either CSAH 2 or CSAH 91 versus the turning movements into the development.

Table 12: 2037 Traffic Operational Analysis – Development Access

Intersection	Peak Hour	Intersection Delay (1.)		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue		
							Direction	Average Queue	Max Queue (Veh)
CSAH 91 & S Access <i>Full Access</i>	AM	3	A	29	D	WBL	WBL/R	2	3
	PM	3	A	14	B	WBL	WBL/R	1	3
E Access & CSAH 2 <i>Stop Controlled</i>	AM	1	A	10	B	NBR	NBR	1	3
	PM	8	A	4	A	NBR	NBR	1	2

1. Delay in seconds per vehicle

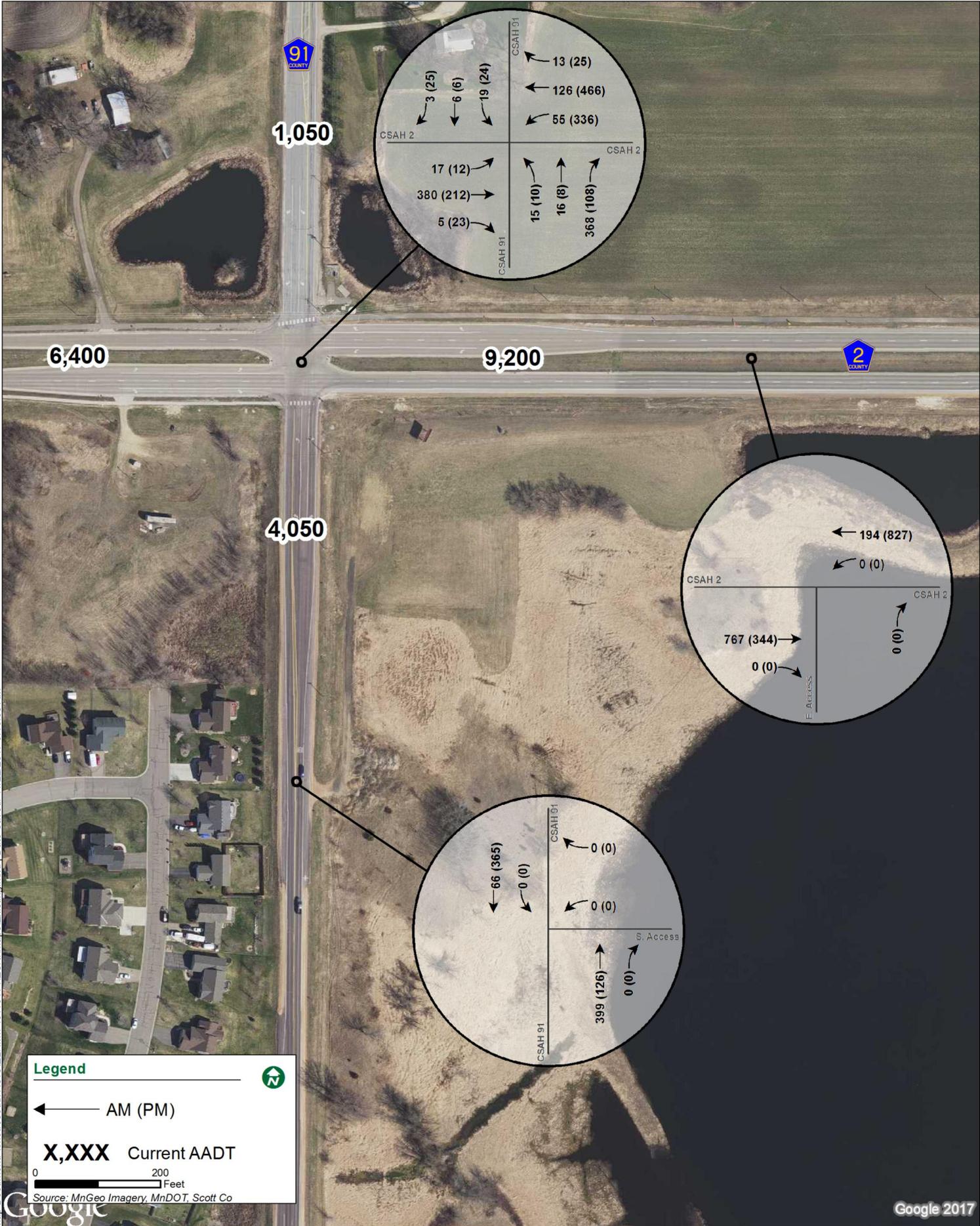
2. Maximum delay and LOS on any approach and/or movement

3. Limiting Movement is the highest delay movement.

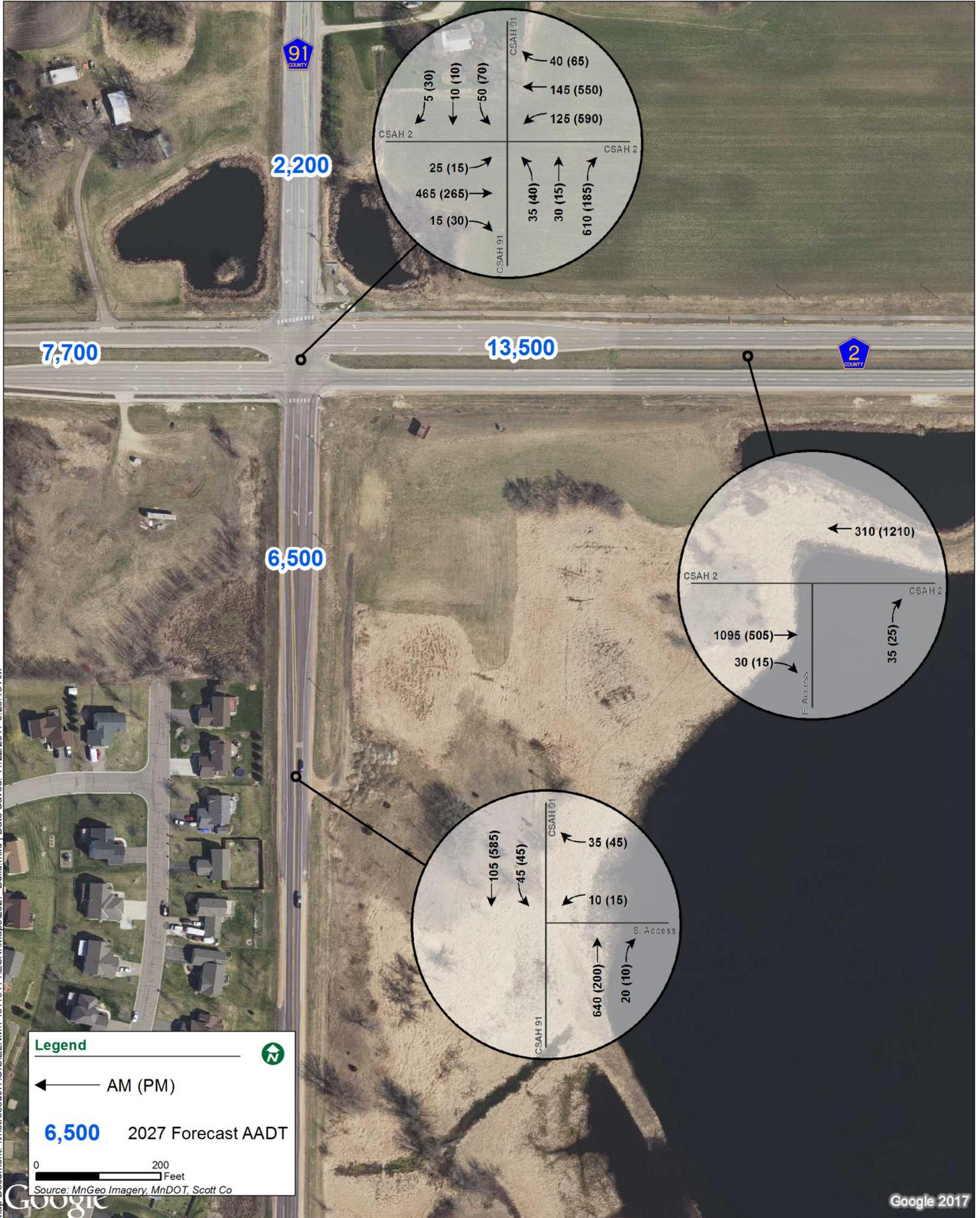
The following summarizes the development access Future Traffic Operations results:

- The intersections are anticipated to have LOS A during the peak hours with the 2037 forecasted traffic volumes.
- The westbound left turning movement exiting the development at the south access to CSAH 91 is anticipated to have LOS D and a maximum queue of three vehicles.
- The northbound right turning movement exiting the development at the east access to CSAH 2 is anticipated to have a LOS B and a maximum queue of three vehicles.

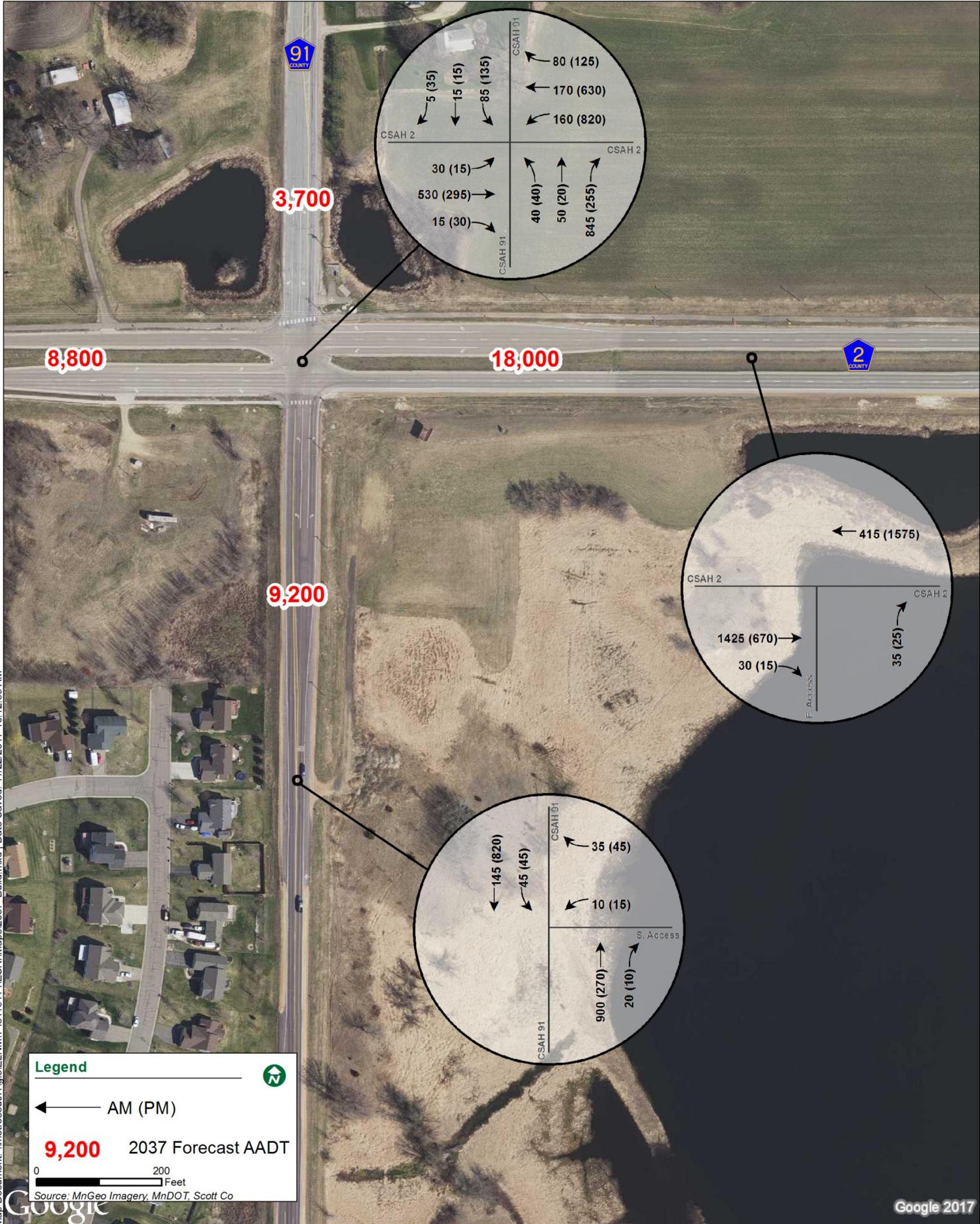
Appendix A-1: Traffic Count Data



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Appendix A-2: Crash Details

Intersection Safety Screening

Intersection: CSAH 91 at CSAH 2



Crash Data, 2013-2015.

Crashes by Crash Severity	
Fatal	0
Incapacitating Injury	1
Non-incapacitating Injury	2
Possible Injury	2
Property Damage	2
Total Crashes	7

Intersection Characteristics	
Entering Volume	10,350
Traffic Control	Thru / stop
Environment	Rural
Speed Limit	55 mph

Annual crash cost = \$363,733

Statewide Comparison

Rural Thru / Stop

Total Crash Rate	
Observed	0.62
Statewide Average	0.26
Critical Rate	0.69
Critical Index	0.90

Fatal & Serious Injury Crash Rate	
Observed	8.82
Statewide Average	1.06
Critical Rate	9.39
Critical Index	0.94

The observed crash rate is the number of crashes per million entering vehicles (MEV). The critical rate is a statistical comparison based on similar intersections statewide. An observed crash rate greater than the critical rate indicates that the intersection operates outside the expected, normal range. The critical index reports the magnitude of this difference.

The observed total crash rate for this period is 0.62 per MEV; this is 10% below the critical rate. Based on similar statewide intersections, an additional 1 crashes over the three years would indicate this intersection operates outside the normal range.

The observed fatal and serious injury crash rate for this period is 8.82 per 100 MEV; this is 6% below the critical rate. The intersection operates within the normal range.



Crash Detail Report

CSAH 2 at CSAH 91 HSIP

Report Version 1.0 March 2010

Crash ID: 132920143	Date: 10/19/2013	Time: 1900	Sys: 04-CSAH
County: SCOTT	City: ELKO		Route: 70000002 014+00.160

Severity: POSSIBLE INJURY	First Event: ON ROADWAY
Road Type: OTHER DIVIDED HIGHWAY	To Junction: 4-LEGGED INTERSECTION
Road Char: STRAIGHT AND LEVEL	Traffic Device: STOP SIGN OTHER
Crash Type: COLL W/MV IN TRANSPORT	Speed Limit: 55
Surf Cond: DRY	Diagram: LEFT TURN INTO TRAFFIC
Light Cond: DARK - STREET LIGHTS ON	Officer:
Weather 1: CLOUDY	Reliability: CONFIDENT
Weather 2: NOT SPECIFIED	# of Vehicles: 3.00

	Unit 1	Unit 2	Unit 3
Trav Dir:	S	E	N
Veh Act:	PED. FAIL TO YIELD R/W TO T	STRAIGHT AHEAD	RIGHT TURN
Veh Type:	PASSENGER CAR	PICKUP TRUCK	SPORT UTILITY VEHICLE
Age:	22	18	56
Gender:	M	M	M
Cond:	UNKNOWN	UNKNOWN	NORMAL
Cont Fact 1	FAIL TO YIELD ROW	NO IMPROPER DRIVING	NO IMPROPER DRIVING
Cont Fact 2	NO IMPROPER DRIVING	NO IMPROPER DRIVING	NO IMPROPER DRIVING

Crash ID: 133450192	Date: 12/11/2013	Time: 1319	Sys: 04-CSAH
County: SCOTT	City: ELKO		Route: 70000002 014+00.160

Severity: PROPERTY DAMAGE	First Event: OUTSIDE RIGHT-OF-WAY
Road Type: 4_6 LANES UNDIV 2_WAY	To Junction: 4-LEGGED INTERSECTION
Road Char: STRAIGHT AND LEVEL	Traffic Device: NOT APPLICABLE
Crash Type: COLL W/UTILITY POLE	Speed Limit: 55
Surf Cond: SLUSH	Diagram: HEAD ON
Light Cond: DAYLIGHT	Officer:
Weather 1: CLEAR	Reliability: CONFIDENT
Weather 2: NOT SPECIFIED	# of Vehicles: 1.00

	Unit 1	Unit 2	Unit 3
Trav Dir:	W		
Veh Act:	STRAIGHT AHEAD		
Veh Type:	PICKUP TRUCK		
Age:	80		
Gender:	M		
Cond:	NORMAL		
Cont Fact 1	DISTRACTION		
Cont Fact 2	SKIDDING		

Crash ID: 150840106 **Date:** 03/21/2015 **Time:** 2223
County: SCOTT **City:** ELKO

Sys: 04-CSAH
Route: 70000002 014+00.159

Severity: POSSIBLE INJURY	First Event: ON ROADWAY
Road Type: OTHER DIVIDED HIGHWAY	To Junction: NON-JUNCTION
Road Char: STRAIGHT AND LEVEL	Traffic Device: NOT APPLICABLE
Crash Type: OVERTURN / ROLLOVER	Speed Limit: 55
Surf Cond: DRY	Diagram: OTHER
Light Cond: DARK - NO STREET LIGHTS	Officer:
Weather 1: CLEAR	Reliability: CONFIDENT
Weather 2: OTHER	# of Vehicles: 1.00

	Unit 1	Unit 2	Unit 3
Trav Dir:	W		
Veh Act:	STRAIGHT AHEAD		
Veh Type:	PASSENGER CAR		
Age:	18		
Gender:	M		
Cond:	UNKNOWN		
Cont Fact 1	OTHER HUMAN FACTOR		
Cont Fact 2	OVER-CORRECTING		

Crash ID: 151020097 **Date:** 04/11/2015 **Time:** 1931
County: SCOTT **City:** ELKO

Sys: 04-CSAH
Route: 70000002 014+00.159

Severity: NON-INCAPACITATING INJURY	First Event: ON ROADWAY
Road Type: 4_6 LANES UNDIV 2_WAY	To Junction: 4-LEGGED INTERSECTION
Road Char: STRAIGHT AND LEVEL	Traffic Device: NOT APPLICABLE
Crash Type: COLL W/MV IN TRANSPORT	Speed Limit: 55
Surf Cond: DRY	Diagram: RIGHT ANGLE
Light Cond: SUNSET	Officer:
Weather 1: CLEAR	Reliability: CONFIDENT
Weather 2: NOT SPECIFIED	# of Vehicles: 2.00

	Unit 1	Unit 2	Unit 3
Trav Dir:	S	E	
Veh Act:	LEFT TURN	STRAIGHT AHEAD	
Veh Type:	PASSENGER CAR	PICKUP TRUCK	
Age:	19	53	
Gender:	F	M	
Cond:	NORMAL	NORMAL	
Cont Fact 1	FAIL TO YIELD ROW	NO IMPROPER DRIVING	
Cont Fact 2	NOT SPECIFIED	NOT SPECIFIED	

Crash ID: 151420180 **Date:** 05/21/2015 **Time:** 1832
County: SCOTT **City:** ELKO

Sys: 04-CSAH
Route: 70000002 014+00.160

Severity: INCAPACITATING INJURY Road Type: 4_6 LANES UNDIV 2_WAY Road Char: STRAIGHT AND LEVEL Crash Type: COLL W/MV IN TRANSPORT Surf Cond: DRY Light Cond: DAYLIGHT Weather 1: CLEAR Weather 2: CLEAR	First Event: ON ROADWAY To Junction: INTERSECTION-RELATED Traffic Device: NOT APPLICABLE Speed Limit: 55 Diagram: OTHER Officer: Reliability: CONFIDENT # of Vehicles: 2.00
--	--

<table border="1"> <tr><th>Unit 1</th></tr> <tr><td>Trav Dir: EAST</td></tr> <tr><td>Veh Act: STRAIGHT AHEAD</td></tr> <tr><td>Veh Type: MOTORCYCLE</td></tr> <tr><td>Age: 57</td></tr> <tr><td>Gender: M</td></tr> <tr><td>Cond: NORMAL</td></tr> <tr><td>Cont Fact 1: OTHER</td></tr> <tr><td>Cont Fact 2: NOT SPECIFIED</td></tr> </table>	Unit 1	Trav Dir: EAST	Veh Act: STRAIGHT AHEAD	Veh Type: MOTORCYCLE	Age: 57	Gender: M	Cond: NORMAL	Cont Fact 1: OTHER	Cont Fact 2: NOT SPECIFIED	<table border="1"> <tr><th>Unit 2</th></tr> <tr><td>S</td></tr> <tr><td>LEFT TURN</td></tr> <tr><td>PASSENGER CAR</td></tr> <tr><td>65</td></tr> <tr><td>F</td></tr> <tr><td>NORMAL</td></tr> <tr><td>FAIL TO YIELD ROW</td></tr> <tr><td>NOT SPECIFIED</td></tr> </table>	Unit 2	S	LEFT TURN	PASSENGER CAR	65	F	NORMAL	FAIL TO YIELD ROW	NOT SPECIFIED	<table border="1"> <tr><th>Unit 3</th></tr> <tr><td> </td></tr> </table>	Unit 3									
Unit 1																														
Trav Dir: EAST																														
Veh Act: STRAIGHT AHEAD																														
Veh Type: MOTORCYCLE																														
Age: 57																														
Gender: M																														
Cond: NORMAL																														
Cont Fact 1: OTHER																														
Cont Fact 2: NOT SPECIFIED																														
Unit 2																														
S																														
LEFT TURN																														
PASSENGER CAR																														
65																														
F																														
NORMAL																														
FAIL TO YIELD ROW																														
NOT SPECIFIED																														
Unit 3																														

Crash ID: 153380218 **Date:** 12/04/2015 **Time:** 1754
County: SCOTT **City:** ELKO

Sys: 04-CSAH
Route: 70000002 014+00.160

Severity: PROPERTY DAMAGE Road Type: 4_6 LANES UNDIV 2_WAY Road Char: STRAIGHT AND LEVEL Crash Type: COLL W/MV IN TRANSPORT Surf Cond: DRY Light Cond: DARK - STREET LIGHTS ON Weather 1: CLEAR Weather 2: NOT SPECIFIED	First Event: ON ROADWAY To Junction: 4-LEGGED INTERSECTION Traffic Device: NOT APPLICABLE Speed Limit: 55 Diagram: LEFT TURN INTO TRAFFIC Officer: Reliability: CONFIDENT # of Vehicles: 2.00
---	--

<table border="1"> <tr><th>Unit 1</th></tr> <tr><td>Trav Dir: EAST</td></tr> <tr><td>Veh Act: LEFT TURN</td></tr> <tr><td>Veh Type: PICKUP TRUCK</td></tr> <tr><td>Age: 36</td></tr> <tr><td>Gender: M</td></tr> <tr><td>Cond: NORMAL</td></tr> <tr><td>Cont Fact 1: FAIL TO YIELD ROW</td></tr> <tr><td>Cont Fact 2: IMPROPER TURN</td></tr> </table>	Unit 1	Trav Dir: EAST	Veh Act: LEFT TURN	Veh Type: PICKUP TRUCK	Age: 36	Gender: M	Cond: NORMAL	Cont Fact 1: FAIL TO YIELD ROW	Cont Fact 2: IMPROPER TURN	<table border="1"> <tr><th>Unit 2</th></tr> <tr><td>W</td></tr> <tr><td>STRAIGHT AHEAD</td></tr> <tr><td>PASSENGER CAR</td></tr> <tr><td>43</td></tr> <tr><td>F</td></tr> <tr><td>NORMAL</td></tr> <tr><td>NO IMPROPER DRIVING</td></tr> <tr><td>NO IMPROPER DRIVING</td></tr> </table>	Unit 2	W	STRAIGHT AHEAD	PASSENGER CAR	43	F	NORMAL	NO IMPROPER DRIVING	NO IMPROPER DRIVING	<table border="1"> <tr><th>Unit 3</th></tr> <tr><td> </td></tr> </table>	Unit 3									
Unit 1																														
Trav Dir: EAST																														
Veh Act: LEFT TURN																														
Veh Type: PICKUP TRUCK																														
Age: 36																														
Gender: M																														
Cond: NORMAL																														
Cont Fact 1: FAIL TO YIELD ROW																														
Cont Fact 2: IMPROPER TURN																														
Unit 2																														
W																														
STRAIGHT AHEAD																														
PASSENGER CAR																														
43																														
F																														
NORMAL																														
NO IMPROPER DRIVING																														
NO IMPROPER DRIVING																														
Unit 3																														

Crash ID: 153530120
County: SCOTT

Date: 12/19/2015
City: ELKO

Time: 1423

Sys: 04-CSAH
Route: 70000002

014+00.160

Severity: NON-INCAPACITATING INJURY
Road Type: OTHER DIVIDED HIGHWAY
Road Char: STRAIGHT AND LEVEL
Crash Type: COLL W/MV IN TRANSPORT
Surf Cond: DRY
Light Cond: DAYLIGHT
Weather 1: CLEAR
Weather 2: NOT SPECIFIED

First Event: ON ROADWAY
To Junction: 4-LEGGED INTERSECTION
Traffic Device: STOP SIGN OTHER
Speed Limit: 55
Diagram: LEFT TURN INTO TRAFFIC
Officer:
Reliability: CONFIDENT
of Vehicles: 2.00

	Unit 1	Unit 2	Unit 3
Trav Dir:	NE	W	
Veh Act:	LEFT TURN	STRAIGHT AHEAD	
Veh Type:	PICKUP TRUCK	PASSENGER CAR	
Age:	70	17	
Gender:	M	F	
Cond:	HAD BEEN DRINKING	NORMAL	
Cont Fact 1	FAIL TO YIELD ROW	NO IMPROPER DRIVING	
Cont Fact 2	NOT SPECIFIED	NOT SPECIFIED	

Selection Filter:

WORK AREA: COUNTY_CODE('70') - FILTER: CRASH_YEAR('2012','2013','2014','2015') - SPATIAL FILTER APPLIED

Analyst:

Mike Larson

Notes:

AGN	ICR	Title	Create Date	Cross St Name	Current Status Date
ENMPD	2.013E+11	Accident	10/19/2013	Natchez Av	11/29/2016
ENMPD	2.014E+11	Accident	2/26/2014	Natchez Av	11/29/2016
ENMPD	2.014E+11	Accident	10/12/2014	Natchez Av	11/29/2016
ENMPD	15000686	Accident	6/15/2015	Natchez Av	11/29/2016
ENMPD	15001440	Accident	11/29/2015	Natchez Av	11/29/2016
ENMPD	15001465	Accident	12/4/2015	Natchez Av	11/29/2016
ENMPD	15001513	Accident	12/19/2015	Natchez Av	11/29/2016
ENMPD	16000236	Accident	3/11/2016	Natchez Av	11/29/2016
ENMPD	16002322	Accident	11/1/2016	NATCHEZ AV	11/20/2016
ENMPD	17000558	Accident	2/4/2017	Natchez AVE	2/12/2017
ENMPD	17001154	Accident	3/14/2017	Natchez AVE	3/19/2017
SCSO	17007046	Accident	4/9/2017	Natchez AVE	4/9/2017
ENMPD	17002123	Accident	5/17/2017	NATCHEZ AVE	5/21/2017
SCSO	17018051	Accident	8/19/2017	Natchez AVE	9/10/2017
ENMPD	17003982	Accident	9/8/2017	Natchez AVE	9/11/2017

Red Text indicates crashes prior to 2015

Yellow Highlight indicates injury crash prior to 2015

Appendix A-3: Warrant Analysis Results



BOLTON & MENK

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2015 Traffic Volumes SIGNAL WARRANTS ANALYSIS

FOR CSAH 2 and CSAH 91

(MINOR APPROACH RT TRAFFIC REMOVED)

LOCATION: Elko New Market, MN

COUNTY: Scott

REF. POINT:

DATE: 11/13/2017

OPERATOR: MPN

Speed	Approach Description		Lanes
55	Major App1:	EB CSAH 2	3
55	Major App3:	WB CSAH 2	3
55	Minor App2:	NB CSAH 91	2
55	Minor App4:	SB CSAH 91	2

0.70 FACTOR USED?

YES

POPULATION < 10,000?

Yes

EXISTING SIGNAL ?

No

THRESHOLDS 1A/1B:

420/630

140/70

140/70

HOUR	MAJOR APP. 1	MAJOR APP. 3	TOTAL 1+3	MAJOR 1A/1B	MINOR APP. 2	MINOR 2 1A/1B	MINOR APP. 4	MINOR 4 1A/1B	MET SAME 1A/1B
0:00 - 1:00	10	32	42	/	1	/	0	/	/
1:00 - 2:00	12	16	28	/	1	/	2	/	/
2:00 - 3:00	4	15	19	/	0	/	0	/	/
3:00 - 4:00	11	11	22	/	1	/	0	/	/
4:00 - 5:00	43	15	58	/	2	/	0	/	/
5:00 - 6:00	182	38	220	/	11	/	6	/	/
6:00 - 7:00	363	139	502	X/	22	/	14	/	/
7:00 - 8:00	348	207	555	X/	31	/	33	/	/
8:00 - 9:00	270	194	464	X/	36	/	12	/	/
9:00 - 10:00	216	148	364	/	12	/	14	/	/
10:00 - 11:00	152	164	316	/	10	/	8	/	/
11:00 - 12:00	150	203	353	/	16	/	11	/	/
12:00 - 13:00	134	188	322	/	14	/	22	/	/
13:00 - 14:00	157	230	387	/	11	/	20	/	/
14:00 - 15:00	172	308	480	X/	14	/	23	/	/
15:00 - 16:00	204	601	805	X/X	20	/	27	/	/
16:00 - 17:00	271	789	1060	X/X	18	/	29	/	/
17:00 - 18:00	229	762	991	X/X	23	/	24	/	/
18:00 - 19:00	186	460	646	X/X	25	/	16	/	/
19:00 - 20:00	105	540	645	X/X	16	/	14	/	/
20:00 - 21:00	90	233	323	/	12	/	3	/	/
21:00 - 22:00	47	190	237	/	4	/	10	/	/
22:00 - 23:00	30	140	170	/	1	/	3	/	/
23:00 - 24:00	8	45	53	/	1	/	0	/	/

Met (Hr) Required (Hr)

Warrant 1A	0	8	Not satisfied
Warrant 1B	0	8	Not satisfied
Warrant 2	0	4	Not satisfied
Warrant 3	0	1	Not satisfied
Warrant 7	0	8	Not satisfied



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**2027 Forecasted Traffic Volumes
SIGNAL WARRANTS ANALYSIS**

**FOR
CSAH 2 and CSAH 91**

(MINOR APPROACH RT TRAFFIC REMOVED)

LOCATION: Elko New Market, MN

COUNTY: Scott

REF. POINT:

DATE: 11/13/2017

OPERATOR: MPN

Speed	Approach Description		Lanes
55	Major App1:	EB CSAH 2	3
55	Major App3:	WB CSAH 2	3
55	Minor App2:	NB CSAH 91	2
55	Minor App4:	SB CSAH 91	2

0.70 FACTOR USED?

YES

POPULATION < 10,000?

Yes

EXISTING SIGNAL ?

No

THRESHOLDS 1A/1B:

420/630

140/70

140/70

HOUR	MAJOR APP. 1	MAJOR APP. 3	TOTAL 1+3	MAJOR 1A/1B	MINOR APP. 2	MINOR 2 1A/1B	MINOR APP. 4	MINOR 4 1A/1B	MET SAME 1A/1B
0:00 - 1:00	13	43	56	/	2	/	0	/	/
1:00 - 2:00	16	21	37	/	2	/	3	/	/
2:00 - 3:00	5	22	27	/	0	/	0	/	/
3:00 - 4:00	15	14	29	/	2	/	0	/	/
4:00 - 5:00	57	19	76	/	4	/	0	/	/
5:00 - 6:00	242	52	294	/	24	/	20	/	/
6:00 - 7:00	479	193	672	X/X	48	/	33	/	/
7:00 - 8:00	459	280	739	X/X	70	/X	82	/X	/X
8:00 - 9:00	354	257	611	X/	80	/X	26	/	/
9:00 - 10:00	283	199	482	X/	26	/	33	/	/
10:00 - 11:00	199	214	413	/	22	/	20	/	/
11:00 - 12:00	196	267	463	X/	35	/	23	/	/
12:00 - 13:00	175	245	420	X/	30	/	53	/	/
13:00 - 14:00	206	314	520	X/	24	/	43	/	/
14:00 - 15:00	223	397	620	X/	31	/	46	/	/
15:00 - 16:00	265	796	1061	X/X	43	/	53	/	/
16:00 - 17:00	352	1075	1427	X/X	39	/	59	/	/
17:00 - 18:00	297	1030	1327	X/X	50	/	59	/	/
18:00 - 19:00	240	613	853	X/X	55	/	43	/	/
19:00 - 20:00	135	754	889	X/X	34	/	20	/	/
20:00 - 21:00	113	318	431	X/	26	/	3	/	/
21:00 - 22:00	60	262	322	/	9	/	10	/	/
22:00 - 23:00	39	193	232	/	2	/	0	/	/
23:00 - 24:00	11	61	72	/	2	/	0	/	/

	Met (Hr)	Required (Hr)	
Warrant 1A	0	8	Not satisfied
Warrant 1B	1	8	Not satisfied
Warrant 2	0	4	Not satisfied
Warrant 3	0	1	Not satisfied
Warrant 7	4	8	Not satisfied



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**2037 Forecasted Traffic Volumes
SIGNAL WARRANTS ANALYSIS**

**FOR
CSAH 2 and CSAH 91**

(MINOR APPROACH RT TRAFFIC REMOVED)

LOCATION: Elko New Market, MN

COUNTY: Scott

REF. POINT:

DATE: 11/13/2017

OPERATOR: MPN

Speed	Approach Description		Lanes
55	Major App1:	EB CSAH 2	3
55	Major App3:	WB CSAH 2	3
55	Minor App2:	NB CSAH 91	2
55	Minor App4:	SB CSAH 91	2

0.70 FACTOR USED?

YES

POPULATION < 10,000?

Yes

EXISTING SIGNAL ?

No

THRESHOLDS 1A/1B:

420/630

140/70

140/70

HOUR	MAJOR APP. 1	MAJOR APP. 3	TOTAL 1+3	MAJOR 1A/1B	MINOR APP. 2	MINOR 2 1A/1B	MINOR APP. 4	MINOR 4 1A/1B	MET SAME 1A/1B
0:00 - 1:00	15	57	72	/	3	/	0	/	/
1:00 - 2:00	18	25	43	/	3	/	6	/	/
2:00 - 3:00	6	32	38	/	0	/	0	/	/
3:00 - 4:00	17	17	34	/	3	/	0	/	/
4:00 - 5:00	65	23	88	/	5	/	0	/	/
5:00 - 6:00	273	69	342	/	30	/	36	/	/
6:00 - 7:00	541	262	803	X/X	62	/	60	/	/
7:00 - 8:00	520	376	896	X/X	89	/X	151	X/X	X/X
8:00 - 9:00	401	337	738	X/X	100	/X	48	/	/X
9:00 - 10:00	320	263	583	X/	30	/	60	/	/
10:00 - 11:00	224	280	504	X/	26	/	36	/	/
11:00 - 12:00	220	346	566	X/	42	/	42	/	/
12:00 - 13:00	197	319	516	X/	37	/	97	/X	/
13:00 - 14:00	232	414	646	X/X	30	/	79	/X	/X
14:00 - 15:00	252	504	756	X/X	40	/	85	/X	/X
15:00 - 16:00	298	1027	1325	X/X	53	/	97	/X	/X
16:00 - 17:00	397	1415	1812	X/X	49	/	109	/X	/X
17:00 - 18:00	333	1349	1682	X/X	63	/	109	/X	/X
18:00 - 19:00	269	793	1062	X/X	67	/	79	/X	/X
19:00 - 20:00	152	1001	1153	X/X	39	/	36	/	/
20:00 - 21:00	129	412	541	X/	30	/	6	/	/
21:00 - 22:00	67	343	410	/	12	/	18	/	/
22:00 - 23:00	43	253	296	/	3	/	0	/	/
23:00 - 24:00	12	78	90	/	2	/	0	/	/

	Met (Hr)	Required (Hr)	
Warrant 1A	1	8	Not satisfied
Warrant 1B	8	8	Satisfied
Warrant 2	4	4	Satisfied
Warrant 3	2	1	Satisfied
Warrant 7	11	8	Satisfied, check accident record

ALL WAY STOP WARRANT 2015 Traffic Volumes

LOCATION: Elko New Markter, MN

COUNTY: Scott

REF. POINT:

DATE: 11/13/2017

OPERATOR: MPN

0.70 FACTOR USED? Yes

Speed	Approach Description	Lanes
55	Major App1: WB CSAH 2	3
55	Major App3: EB CSAH 2	3
55	Minor App2: NB CSAH 91	2
55	Minor App4: SB CSAH 91	2

210

140

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	MAJOR TOTAL Σ (APP. 1 & APP. 3)	MINOR TOTAL APP. 2 + APP. 4	WARRANT MET
0:00 - 1:00	32	10	3	0	42	3	/
1:00 - 2:00	16	12	6	2	28	8	/
2:00 - 3:00	15	4	6	0	19	6	/
3:00 - 4:00	11	11	13	0	22	13	/
4:00 - 5:00	15	43	51	0	58	51	/
5:00 - 6:00	38	182	205	6	220	211	X/X
6:00 - 7:00	139	363	372	14	502	386	X/X
7:00 - 8:00	207	348	370	33	555	403	X/X
8:00 - 9:00	194	270	225	12	464	237	X/X
9:00 - 10:00	148	216	135	14	364	149	X/X
10:00 - 11:00	164	152	101	8	316	109	X/
11:00 - 12:00	203	150	96	11	353	107	X/
12:00 - 13:00	188	134	77	22	322	99	X/
13:00 - 14:00	230	157	89	20	387	109	X/
14:00 - 15:00	308	172	99	23	480	122	X/
15:00 - 16:00	601	204	118	27	805	145	X/X
16:00 - 17:00	789	271	121	29	1060	150	X/X
17:00 - 18:00	762	229	132	24	991	156	X/X
18:00 - 19:00	460	186	110	16	646	126	X/
19:00 - 20:00	540	105	51	14	645	65	X/
20:00 - 21:00	233	90	52	3	323	55	X/
21:00 - 22:00	190	47	25	10	237	35	X/
22:00 - 23:00	140	30	22	3	170	25	/
23:00 - 24:00	45	8	4	0	53	4	/

Met (Hr) Required (Hr)

Allway Stop Warrant: **8** 8 **Satisfied**

REMARKS: _____

ALL WAY STOP WARRANT 2027 Traffic Volumes

LOCATION: Elko New Market, MN

COUNTY: Scott

REF. POINT:

DATE: 11/13/2017

OPERATOR: MPN

0.70 FACTOR USED? Yes

Speed	Approach Description	Lanes
55	Major App1: WB CSAH 2	3
55	Major App3: EB CSAH 2	3
55	Minor App2: NB CSAH 91	2
55	Minor App4: SB CSAH 91	2

210

140

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	MAJOR TOTAL Σ (APP. 1 & APP. 3)	MINOR TOTAL APP. 2 + APP. 4	WARRANT MET
0:00 - 1:00	43	13	6	2	56	8	/
1:00 - 2:00	21	16	12	2	37	14	/
2:00 - 3:00	22	5	12	0	27	12	/
3:00 - 4:00	14	15	27	2	29	29	/
4:00 - 5:00	19	57	105	4	76	109	/
5:00 - 6:00	52	242	422	24	294	446	X/X
6:00 - 7:00	193	479	767	48	672	815	X/X
7:00 - 8:00	280	459	766	70	739	836	X/X
8:00 - 9:00	257	354	468	80	611	548	X/X
9:00 - 10:00	199	283	279	26	482	305	X/X
10:00 - 11:00	214	199	209	22	413	231	X/X
11:00 - 12:00	267	196	199	35	463	234	X/X
12:00 - 13:00	245	175	159	30	420	189	X/X
13:00 - 14:00	314	206	184	24	520	208	X/X
14:00 - 15:00	397	223	206	31	620	237	X/X
15:00 - 16:00	796	265	244	43	1061	287	X/X
16:00 - 17:00	1075	352	250	39	1427	289	X/X
17:00 - 18:00	1030	297	274	50	1327	324	X/X
18:00 - 19:00	613	240	230	55	853	285	X/X
19:00 - 20:00	754	135	106	34	889	140	X/X
20:00 - 21:00	318	113	108	26	431	134	X/
21:00 - 22:00	262	60	52	9	322	61	X/
22:00 - 23:00	193	39	45	2	232	47	X/
23:00 - 24:00	61	11	8	2	72	10	/

Met (Hr) Required (Hr)

Allway Stop Warrant: **15** 8 **Satisfied**

REMARKS: _____

ALL WAY STOP WARRANT 2037 Traffic Volumes

LOCATION: Elko New Market, MN

COUNTY: Scott

REF. POINT:

DATE: 11/13/2017

OPERATOR: MPN

0.70 FACTOR USED? Yes

Speed	Approach Description	Lanes
55	Major App1: WB CSAH 2	3
55	Major App3: EB CSAH 2	3
55	Minor App2: NB CSAH 91	2
55	Minor App4: SB CSAH 91	2

210

140

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	MAJOR TOTAL Σ (APP. 1 & APP. 3)	MINOR TOTAL APP. 2 + APP. 4	WARRANT MET
0:00 - 1:00	57	15	9	0	72	9	/
1:00 - 2:00	25	18	17	6	43	23	/
2:00 - 3:00	32	6	17	0	38	17	/
3:00 - 4:00	17	17	37	0	34	37	/
4:00 - 5:00	23	65	144	0	88	144	/X
5:00 - 6:00	69	273	580	36	342	616	X/X
6:00 - 7:00	262	541	1054	60	803	1114	X/X
7:00 - 8:00	376	520	1050	151	896	1201	X/X
8:00 - 9:00	337	401	636	48	738	684	X/X
9:00 - 10:00	263	320	379	60	583	439	X/X
10:00 - 11:00	280	224	284	36	504	320	X/X
11:00 - 12:00	346	220	269	42	566	311	X/X
12:00 - 13:00	319	197	216	97	516	313	X/X
13:00 - 14:00	414	232	251	79	646	330	X/X
14:00 - 15:00	504	252	281	85	756	366	X/X
15:00 - 16:00	1027	298	331	97	1325	428	X/X
16:00 - 17:00	1415	397	341	109	1812	450	X/X
17:00 - 18:00	1349	333	372	109	1682	481	X/X
18:00 - 19:00	793	269	308	79	1062	387	X/X
19:00 - 20:00	1001	152	138	36	1153	174	X/X
20:00 - 21:00	412	129	143	6	541	149	X/X
21:00 - 22:00	343	67	72	18	410	90	X/
22:00 - 23:00	253	43	63	0	296	63	X/
23:00 - 24:00	78	12	11	0	90	11	/

Met (Hr) Required (Hr)

Allway Stop Warrant: **16** 8 **Satisfied**

REMARKS: _____

Appendix A-4: Traffic Operations

Existing - Delays By Movement

Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																									
				NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR		WBL		WBT		WBR			
CH 91 & CH 2 <i>Stop Controlled</i>	AM	3	A	12	B	12	B	6	A	14	B	11	B	1	A	1	A	1	A	1	A	1	A	3	A	0	A	0	A
	PM	4	A	89	F	20	C	2	A	79	F	13	B	1	A	4	A	1	A	1	A	1	A	5	A	1	A	0	A

1. Delay in seconds per vehicle

Existing - Queues By Movement

Intersection	Peak Hour	Queue Lengths																	
		EBL		EBR		WBL		NBL		NBT		NBR		SBL		SBT		SBR	
		Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
CH 91 & CH 2 <i>Stop Controlled</i>	AM	25	25	-	-	25	50	25	50	25	50	50	150	25	50	25	25	25	25
	PM	25	25	25	25	50	125	25	75	25	25	25	50	25	100	25	50	25	50

2037 Build Geometry - Access Review - Delays By Movement

Intersection	Peak Hour	Intersection Delay (I.)		Movement Delay (sec/veh)																				
				NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR		WBL		WBT
CH 91 & S Access <i>Stop Controlled</i>	AM	3	A	-	3	A	0	A	8	A	1	A	-	-	-	-	-	-	28	D	-	-	15	C
	PM	3	A	-	1	A	0	A	4	A	3	A	-	-	-	-	-	-	15	C	-	-	5	A
E Access & CH 2 <i>Stop Controlled</i>	AM	2	A	-	-	-	12	B	-	-	-	-	-	-	1	A	1	A	56	F	0	A	-	-
	PM	4	A	-	-	-	4	A	-	-	-	-	-	-	2	A	2	A	9	A	5	A	-	-

1. Delay in seconds per vehicle

2037 Build Geometry - Access Review - Queues By Movement

Intersection	Peak Hour	Queue Lengths																								
		EBL/T/R		EBR		WBL		WBL/R		WBL/T/R		WBT 1		WBT 2		WBT/R		NBL/T		NBR		SBL		SBL/T/R		
		Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	
CH 91 & S Access <i>Stop Controlled</i>	AM	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-
	PM	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-
E Access & CH 2 <i>Stop Controlled</i>	AM	-	-	0	25	50	100	-	-	-	-	0	25	-	-	-	-	-	-	-	25	75	-	-	-	-
	PM	-	-	-	-	25	75	-	-	-	-	25	125	25	150	-	-	-	-	-	25	50	-	-	-	-

Appendix B: Cost Estimate



Preliminary Cost Estimate
Elko New Market & Scott County
CSAH 91 Right Turn Lane
 January 2018

Real People. Real Solutions.

Item	Unit	Unit Cost	Quantity	Estimated Cost
1.0 Removals				
1.01 REMOVE CURB AND GUTTER	LF	\$ 7.50		\$ -
1.02 REMOVE CONCRETE WALK	SF	\$ 2.00		\$ -
1.03 SAWING BITUMINOUS PAVEMENT FULL DEPTH	LF	\$ 4.25		\$ -
1.04 MILL BITUMINOUS SURFACE (6")	SY	\$ 4.00		\$ -
1.05 DRAINAGE REMOVALS	LS		1	\$ -
				\$ -
2.0 Roadway				
2.01 COMMON EXCAVATION & EMBANKMENT	CY	\$ 21.50	476	\$ 10,241
2.02 SELECT GRANULAR MATERIAL (12")	CY	\$ 22.75	238	\$ 5,418
2.03 AGGREGATE BASE (CV) CLASS 5 (12")	CY	\$ 39.00	213	\$ 8,311
2.04 6" BITUMINOUS (roadway)	TON	\$ 61.50	196	\$ 12,043
2.05 4" CONCRETE (medians)	SF	\$ 5.25		\$ -
2.06 8" CONCRETE APRONS (roundabouts)	SY	\$ 83.00		\$ -
2.07 CONCRETE CURB & GUTTER DESIGN B612	LF	\$ 39.00		\$ -
2.08 CONCRETE CURB & GUTTER DESIGN B624	LF	\$ 26.75		\$ -
2.09 CONCRETE CURB & GUTTER DESIGN S524	LF	\$ 41.75		\$ -
				\$ 36,000
3.0 Sidewalks/Trails				
3.01 COMMON EXCAVATION & EMBANKMENT	CY	\$ 21.50		\$ -
3.02 SELECT GRANULAR MATERIAL (6")	CY	\$ 22.75		\$ -
3.03 AGGREGATE BASE (CV) CLASS 5 (6")	CY	\$ 39.00		\$ -
3.04 3" BITUMINOUS (trail)	TON	\$ 74.00		\$ -
3.05 6" CONCRETE WALK (ped ramps)	SF	\$ 9.25		\$ -
3.06 4" CONCRETE WALK	SF	\$ 5.75		\$ -
3.07 TRUNCATED DOMES	SF	\$ 54.75		\$ -
				\$ -
4.0 Lighting				
4.01 LIGHTING STRUCTURES	LS		1	\$ -
				\$ -
5.0 City Utilities				
5.01 WATERMAIN	LS	\$ -	1	\$ -
5.02 SANITARY SEWER	LS	\$ -	1	\$ -
				\$ -
6.0 Storm Sewer				
6.01 STORM SEWER	LS	\$ -	1	\$ -
6.02 TREATMENT	LS	\$ -	1	\$ -
				\$ -
7.0 Traffic Signing and Striping				
7.01 SIGNS AND PAVEMENT MARKINGS	%		-	\$ -
				\$ -
8.0 Streetscape and Aesthetics				
8.01 STREETScape & AESTHETICS	%		-	\$ -
				\$ -
9.0 Turf and Erosion Control				
9.01 TURF ESTABLISHMENT AND EROSION CONTROL	%		-	\$ -
				\$ -
10.0 Other Misc. Removals				
10.01 MISC. REMOVEVALS	%	10%	-	\$ 4,000
				\$ 4,000
11.0 Other Misc. Items				
11.01 OTHER MISC. ITEMS	%	10%	-	\$ 4,000
				\$ 4,000
12.0 Mobilization/Traffic Control				
12.01 MOBILIZATION	%		-	\$ -
12.02 TRAFFIC CONTROL	%		-	\$ -
				\$ -
TOTAL CONSTRUCTION COST				\$45,000
13.0 Property Acquisitions				
13.01 RIGHT OF WAY ACQUISITIONS	SF	\$ 4.95		\$ -
13.02 EASEMENTS	SF	\$ 1.00		\$ -
				\$ -
14.0 Project Development and Delivery				
14.01 PROJECT DEVELOPMENT AND DELIVERY	%	20%	-	\$ 8,800
				\$ 9,000
TOTAL PROJECT COST				\$55,000

Notes:

Milled Material to be used for Aggregate Base Material for Constuction

Assume 50% recycled bituminous material
 TYPE SP 12.5 (3/C)

Assume 50% recycled bituminous material
 TYPE SP 9.5 (3/C)

Assumed 20SF per location

Connecting to existing, 1 manholes, 2 adjustments to existing manholes

Connecting to existing, 11 drainage structures, 5 casting covers, new sewer pipe

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed 10% of Construction Cost

Assumed 10% of Construction Cost

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed ~ 20% of full right-of-way acquisition cost

20% Project Delivery

Notes:

The aggregate remaining from MILLED BITUMINOUS SURFACE (1.04) should be used for RECYCLED AGGREGATE BASE MATERIAL (2.03). Cost associated with 2.03 is for moving and placing material. Excess material should be the responsibility of the contractor



Preliminary Cost Estimate
Elko New Market & Scott County
CSAH 2 & 91 - Median to Aaron
 January 2018

Real People. Real Solutions.

Item	Unit	Unit Cost	Quantity	Estimated Cost
1.0 Removals				
1.01 REMOVE CURB AND GUTTER	LF	\$ 7.50		\$ -
1.02 REMOVE CONCRETE WALK	SF	\$ 2.00		\$ -
1.03 SAWING BITUMINOUS PAVEMENT FULL DEPTH	LF	\$ 4.25	333	\$ 1,415
1.04 MILL BITUMINOUS SURFACE (6")	SY	\$ 4.00	2562	\$ 10,247
1.05 DRAINAGE REMOVALS	LS	\$ 10,000		\$ -
				\$ 12,000
2.0 Roadway				
2.01 COMMON EXCAVATION & EMBANKMENT	CY	\$ 21.50	1303	\$ 28,024
2.02 SELECT GRANULAR MATERIAL (12")	CY	\$ 22.75	652	\$ 14,826
2.03 AGGREGATE BASE (CV) CLASS 5 (12")	CY	\$ 39.00	271	\$ 10,557
2.04 6" BITUMINOUS (roadway)	TON	\$ 61.50	1063	\$ 65,387
2.05 4" CONCRETE (medians)	SF	\$ 5.25	2800	\$ 14,698
2.06 8" CONCRETE APRONS (roundabouts)	SY	\$ 83.00		\$ -
2.07 CONCRETE CURB & GUTTER DESIGN B612	LF	\$ 39.00		\$ -
2.08 CONCRETE CURB & GUTTER DESIGN B624	LF	\$ 26.75	1360	\$ 36,373
2.09 CONCRETE CURB & GUTTER DESIGN S524	LF	\$ 41.75		\$ -
				\$ 170,000
3.0 Sidewalks/Trails				
3.01 COMMON EXCAVATION & EMBANKMENT	CY	\$ 21.50	36	\$ 770
3.02 SELECT GRANULAR MATERIAL (6")	CY	\$ 22.75	19	\$ 439
3.03 AGGREGATE BASE (CV) CLASS 5 (6")	CY	\$ 39.00	13	\$ 497
3.04 3" BITUMINOUS (trail)	TON	\$ 74.00		\$ -
3.05 6" CONCRETE WALK (ped ramps)	SF	\$ 9.25	274	\$ 2,537
3.06 4" CONCRETE WALK	SF	\$ 5.75	103	\$ 591
3.07 TRUNCATED DOMES	SF	\$ 54.75	91	\$ 4,980
				\$ 10,000
4.0 Lighting				
4.01 LIGHTING STRUCTURES	LS	\$ 80,000		\$ -
				\$ -
5.0 City Utilities				
5.01 WATERMAIN	LS	\$ -		\$ -
5.02 SANITARY SEWER	LS	\$ 12,000		\$ -
				\$ -
6.0 Storm Sewer				
6.01 STORM SEWER	LS	\$ 72,000		\$ -
6.02 TREATMENT	LS	\$ 24,000		\$ -
				\$ -
7.0 Traffic Signing and Striping				
7.01 SIGNS AND PAVEMENT MARKINGS	%	4%	-	\$ 8,000
				\$ 8,000
8.0 Streetscape and Aesthetics				
8.01 STREETScape & AESTHETICS	%		-	\$ -
				\$ -
9.0 Turf and Erosion Control				
9.01 TURF ESTABLISHMENT AND EROSION CONTROL	%		-	\$ -
				\$ -
10.0 Other Misc. Removals				
10.01 MISC. REMOVEVALS	%	5%	-	\$ 10,000
				\$ 10,000
11.0 Other Misc. Items				
11.01 OTHER MISC. ITEMS	%	5%	-	\$ 10,000
				\$ 10,000
12.0 Mobilization/Traffic Control				
12.01 MOBILIZATION	%		-	\$ -
12.02 TRAFFIC CONTROL	%		-	\$ -
				\$ -
TOTAL CONSTRUCTION COST				\$220,000
13.0 Property Acquisitions				
13.01 RIGHT OF WAY ACQUISITIONS	SF	\$ 4.95		\$ -
13.02 EASEMENTS	SF	\$ 1.00		\$ -
				\$ -
14.0 Project Development and Delivery				
14.01 PROJECT DEVELOPMENT AND DELIVERY	%	20%	-	\$ 44,000
				\$ 44,000
TOTAL PROJECT COST				\$264,000

Notes:

Milled Material to be used for Aggregate Base Material for Constuction

Assume 50% recycled bituminous material
 TYPE SP 12.5 (3/C)

Assume 50% recycled bituminous material
 TYPE SP 9.5 (3/C)

Assumed 20SF per location

Connecting to existing, 1 manholes, 2 adjustments to existing manholes

Connecting to existing, 11 drainage structures, 5 casting covers, new sewer pipe

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed 10% of Construction Cost

Assumed 10% of Construction Cost

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed ~ 20% of full right-of-way acquisition cost

20% Project Delivery

Notes:

The aggregate remaining from MILLED BITUMINOUS SURFACE (1.04) should be used for RECYCLED AGGREGATE BASE MATERIAL (2.03). Cost associated with 2.03 is for moving and placing material. Excess material should be the responsibility of the contractor



Preliminary Cost Estimate
Elko New Market & Scott County
CSAH 2 & 91 - Left Turn Lane
 January 2018

Real People. Real Solutions.

Item	Unit	Unit Cost	Quantity	Estimated Cost
1.0 Removals				
1.01 REMOVE CURB AND GUTTER	LF	\$ 7.50		\$ -
1.02 REMOVE CONCRETE WALK	SF	\$ 2.00		\$ -
1.03 SAWING BITUMINOUS PAVEMENT FULL DEPTH	LF	\$ 4.25	6	\$ 24
1.04 MILL BITUMINOUS SURFACE (6")	SY	\$ 4.00	188	\$ 753
1.05 DRAINAGE REMOVALS	LS	\$ 10,000	1	\$ 10,000
				\$ 11,000
2.0 Roadway				
2.01 COMMON EXCAVATION & EMBANKMENT	CY	\$ 21.50	671	\$ 14,424
2.02 SELECT GRANULAR MATERIAL (12")	CY	\$ 22.75	335	\$ 7,631
2.03 AGGREGATE BASE (CV) CLASS 5 (12")	CY	\$ 39.00	152	\$ 5,946
2.04 6" BITUMINOUS (roadway)	TON	\$ 61.50	216	\$ 13,282
2.05 4" CONCRETE (medians)	SF	\$ 5.25	3,878	\$ 20,362
2.06 8" CONCRETE APRONS (roundabouts)	SY	\$ 83.00		\$ -
2.07 CONCRETE CURB & GUTTER DESIGN B612	LF	\$ 39.00	758	\$ 29,571
2.08 CONCRETE CURB & GUTTER DESIGN B624	LF	\$ 26.75		\$ -
2.09 CONCRETE CURB & GUTTER DESIGN S524	LF	\$ 41.75		\$ -
				\$ 91,000
3.0 Sidewalks/Trails				
3.01 COMMON EXCAVATION & EMBANKMENT	CY	\$ 21.50		\$ -
3.02 SELECT GRANULAR MATERIAL (6")	CY	\$ 22.75		\$ -
3.03 AGGREGATE BASE (CV) CLASS 5 (6")	CY	\$ 39.00		\$ -
3.04 3" BITUMINOUS (trail)	TON	\$ 74.00		\$ -
3.05 6" CONCRETE WALK (ped ramps)	SF	\$ 9.25		\$ -
3.06 4" CONCRETE WALK	SF	\$ 5.75		\$ -
3.07 TRUNCATED DOMES	SF	\$ 54.75		\$ -
				\$ -
4.0 Lighting				
4.01 LIGHTING STRUCTURES	LS	\$ 80,000		\$ -
				\$ -
5.0 City Utilities				
5.01 WATERMAIN	LS	\$ -		\$ -
5.02 SANITARY SEWER	LS	\$ 12,000		\$ -
				\$ -
6.0 Storm Sewer				
6.01 STORM SEWER	LS	\$ 72,000		\$ -
6.02 TREATMENT	LS	\$ 24,000		\$ -
				\$ -
7.0 Traffic Signing and Striping				
7.01 SIGNS AND PAVEMENT MARKINGS	%	5%	-	\$ 6,000
				\$ 6,000
8.0 Streetscape and Aesthetics				
8.01 STREETScape & AESTHETICS	%		-	\$ -
				\$ -
9.0 Turf and Erosion Control				
9.01 TURF ESTABLISHMENT AND EROSION CONTROL	%		-	\$ -
				\$ -
10.0 Other Misc. Removals				
10.01 MISC. REMOVEVALS	%	7%	-	\$ 8,000
				\$ 8,000
11.0 Other Misc. Items				
11.01 OTHER MISC. ITEMS	%	8%	-	\$ 9,000
				\$ 9,000
12.0 Mobilization/Traffic Control				
12.01 MOBILIZATION	%		-	\$ -
12.02 TRAFFIC CONTROL	%		-	\$ -
				\$ -
TOTAL CONSTRUCTION COST				\$125,000
13.0 Property Acquisitions				
13.01 RIGHT OF WAY ACQUISITIONS	SF	\$ 4.95	10,000	\$ 49,500
13.02 EASEMENT	SF	\$ 1.00		\$ -
				\$ 50,000
14.0 Project Development and Delivery				
14.01 PROJECT DEVELOPMENT AND DELIVERY	%	20%	-	\$ 25,000
				\$ 25,000
TOTAL PROJECT COST				\$200,000

Notes:

Milled Material to be used for Aggregate Base Material for Constuction

Assume 50% recycled bituminous material
 TYPE SP 12.5 (3/C)

Assume 50% recycled bituminous material
 TYPE SP 9.5 (3/C)

Assumed 20SF per location

16 lights for roundabout at \$5,000

Connecting to existing, 1 manholes, 2 adjustments to existing manholes

Connecting to existing, 11 drainage structures, 5 casting covers, new sewer pipe

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

Assumed 10% of Construction Cost

Assumed 10% of Construction Cost

Assumed 5% of Construction Cost

Assumed 5% of Construction Cost

20% Project Delivery

Notes:

The aggregate remaining from MILLED BITUMINOUS SURFACE (1.04) should be used for RECYCLED AGGREGATE BASE MATERIAL (2.03). Cost associated with 2.03 is for moving and placing material. Excess material should be the responsibility of the contractor

Appendix C: Additional Element Details

Additional Improvement Opportunities

CSAH 2 & CSAH 91 Roundabout

Improvement Opportunity	Alternatives	Example & Cost Estimates	Public Support	Notes
Trail Connections	CR 91 to Aaron Drive	\$175, 000	Business Advisory Meeting: <ul style="list-style-type: none"> • 6 votes as second highest priority • 4 votes as second highest priority • 1 vote as third highest priority Open House: <ul style="list-style-type: none"> • 7 votes 	
	CR 2 (Main St) to France Ave	\$245, 000		
Continuous Lighting	Functional Lighting	\$150, 000 	Business Advisory Meeting: <ul style="list-style-type: none"> • 2 votes as highest priority • 1 vote as second highest priority Open House: <ul style="list-style-type: none"> • 7 votes 	Calculated to meet lighting requirements for County arterial roadway
	Acorn (Continuation of lighting identified in Downtown Improvement Committee lighting plan)	\$580, 000 		Cost covers lighting spaced at 100' O.C. along both sides of road
	Additional Decorative Alternatives	\$710,000+ 		Examples of enhanced features: decorative poles & bases, banner arm/flag pole, additional lamps, customizations

Improvement Opportunity	Alternatives	Example & Cost Estimates	Public Support	Notes
Downtown Lighting	Acorn	\$190,000 	n/a	Estimated from 2008 Downtown improvement committee layout
Roundabout Enhancements	Plantings	\$45,000 	Business Advisory Meeting: <ul style="list-style-type: none"> • 2 votes as second highest priority • 4 votes as third highest priority Open House: <ul style="list-style-type: none"> • 6 votes 	Examples of plantings: ornamental trees, evergreen trees, perennials, ornamental grasses
	Plantings & Hardscape Feature	\$105,000 		Hardscape features may include: entry monument, public artwork, specialty pavement, raised planting bed
Landscaping *not including roundabout	Street Trees	*\$75,000 	Open House: <ul style="list-style-type: none"> • 9 votes 	*Wide range of application levels with associated cost implications
	Street Trees & Perennial Plantings	*\$150,000+ 		

Improvement Opportunity	Alternatives	Example & Cost Estimates	Public Support	Notes
Monuments	Simple entry monument at key points	\$20,000 each 	Business Advisory Meeting: <ul style="list-style-type: none"> 1 vote as second highest priority 5 votes as lowest priority Open House: <ul style="list-style-type: none"> Item did not receive nay votes 	
	Additional customization to entry monument	\$30,000 each 		
	Highly customized w/ several different elements	\$60,000+ each 		
Pavement Treatments	Decorative Scoring	\$120,000  <p><i>Pavement treatments continued on next page</i></p>	Business Advisory Meeting: <ul style="list-style-type: none"> 2 votes as third highest priority 3 votes as lowest priority Open House: <ul style="list-style-type: none"> Item did not receive nay votes 	

Improvement Opportunity	Alternatives	Example & Cost Estimates	Public Support	Notes
Pavement Treatments <i>(continued)</i>	Stamped & Colored	\$260,000 	See previous page	
	Pavers	\$300,000 		
	Enhanced Stamp & Color	\$380,000 		
Site Furnishings/ Amenities	Banner Pole with or without Light	With light: \$145,000 Without light: \$54,000 	Business Advisory Meeting: <ul style="list-style-type: none"> • 1 vote as third highest priority Open House: <ul style="list-style-type: none"> • 1 vote 	
	Benches	\$800 each 		



Real People. Real Solutions.

12224 Nicollet Avenue
Burnsville, MN 55337-1649

Ph: (952) 890-0509
Fax: (952) 890-8065
Bolton-Menk.com

MEMORANDUM

Date: June 28, 2018
To: Mayor Crawford and the Elko New Market City Council
Tom Terry, City Administrator
From: Rich Revering, PE – City Engineer
Subject: CSAHs 2 and 91 Roundabout Preliminary Design Phase Proposal
Elko New Market
Project No.: T43.115114

BACKGROUND

The City Council is being asked to review and approve the attached Preliminary Design Phase proposal for the roundabout to be constructed in 2020 at the intersection of CSAHs 2 and 91 in Elko New Market.

DISCUSSION

The preliminary design phase is an important next step for the delivery of the project in 2020. The key outcomes will be finalizing the overall project scope and features to be included and approval of the geometric layout by Scott County.

Aaron Warford, PE of Bolton & Menk, Inc. will walk the council through the attached proposal at the meeting and respond to questions about the next phase of work.

RECOMMENDATION

It is recommended the council discuss to the point of full understanding, then approve the attached proposal for preliminary design phase services.

End of Memo



**BOLTON
& MENK**

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12224 Nicollet Avenue
Burnsville, MN 55337-1649

Ph: (952) 890-0509
Fax: (952) 890-8065
Bolton-Menk.com

June 21, 2018

Mayor Crawford and Members of the Elko New Market City Council
City of Elko New Market
601 Main Street, P.O. Box 99
Elko New Market, MN 55020

RE: Proposal for CSAH 2 and CSAH 91 Roundabout Design

Dear Mayor and City Council,

The 2020 funded roundabout project at CSAH 2 and CSAH 91 is a combination of past efforts including the *Gateway and Access Study*, *Highway Safety Improvement Program Application*, and the *Roundabout Concept Design*. Each effort has brought the project closer to the City's long term goal. The purpose of this proposal is to establish a geometric layout for the CSAH 2 and CSAH 91 roundabout and make final decisions on the features to be included with the roundabout in order to prepare the project for final design and construction in 2020.

Past Studies and Layouts

CSAH 2 and CSAH 91 Roundabout Concept Design - 2018

The roundabout concept design included analysis of long-term regional and local traffic, bike/pedestrian needs, right-of-way impacts, and public/stakeholder involvement in an effort to determine a preferred concept for the intersection. The study process evaluated multiple design alternatives and options, along with associated cost estimates, including: roadway improvements, pedestrian and bicycle accommodations, streetscaping elements and lighting opportunities. This study resulted in a preferred conceptual design that satisfied the needs of the City of Elko New Market and Scott County, in addition to gaining public buy-in for the project. No additional review of major alternatives will be required for the design effort described within this proposal.

Scope of Services

The following proposal details the proposed scope, schedule and fee to provide a final geometric layout, scope of add-ons, and cost estimate for the City (Council, staff, and public) for the agreed upon improvements included in the 2020 roundabout project.

Bolton & Menk proposes to perform the tasks detailed in the following proposal on an hourly basis for a not-to-exceed amount of \$55,890. This includes \$8,500 in geotechnical exploration and \$8,000 in peer review. The geotechnical work will provide information needed for best value pavement design and can help avoid surprises during construction. The peer review is a Scott County requirement. The design elements of the scope include project management, public involvement, management, review, and correlation of geotechnical studies, surveying and mapping, utility coordination, environmental documentation, and preparation of the final geometric design layout. Visualization options available to the city are described in the proposal; however, costs for the options are not included in the above not-to-exceed amount.

Name: City of Elko New Market

Date: June 21, 2018

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Bolton & Menk will continue the Public and Agency Involvement efforts initiated during past projects and studies. Engaging local stakeholders and the general public throughout the design phases will aid the project by avoiding costly design and schedule changes in the future. An effective public involvement process contributes to a more successful project because it helps confront and contain risks.

Key Outcomes

- A geometric layout will be developed to move the project to a 30% design level and ready for final design.
- Final decisions on project “add-ons” such as trails, lighting, landscaping, etc.
- Detailed identification of right-of-way needs.
- An updated cost estimate based on the geometric layout.
- Peer Review Report
- County approval of final geometric design layout

In continued service to the City of Elko New Market, we are excited for the opportunity to assist in the next phase of the CSAH 2 and CSAH 91 roundabout project. Please contact me at 952.890.0509 or aaronwa@bolton-menk.com if you have any questions regarding our proposal

Respectfully submitted,

Bolton and Menk, Inc.



Aaron Warford, P.E.

Principal Transportation Engineer

Detailed Work Plan

Task 1: Project Management

1.1 Project Management Tools and Administration

Below is a list of important project management tools that will be utilized on this project:

- Monthly progress reports and updates to the City
- Proactive discussions to stay on task and schedule
- Presentation and meeting content shared one week prior to meetings

1.2 General Coordination

Aaron's management will proactively address the needs of the project, while consistently adjusting the project course at the direction of City staff and representatives. Aaron specializes in commanding the room at meetings, digging into concerns and finding a sustainable solution. Our team is highly familiar with the project and project history and will use this knowledge to help streamline the process for the City.

From start to finish, biweekly updates and communication will be provided through email and phone calls. Progress reports and project updates will be planned bimonthly (may be adjusted with project timeline) and integrated with the project management team meetings.

Aaron and the project team will work closely with the City of Elko New Market engineer, Rich Revering. Rich's primary role will be as city engineer, reviewing the work on behalf of the city, providing needed background information and/or coordination with staff. City engineer tasks and costs associated with this project are not included in this proposal and would be billed to the city separately as a general engineering service. Any time Rich might have on QA/QC or preparation of documents on behalf of Bolton & Menk, Inc. is included in the not-to-exceed fee; however, it is expected these roles will be filled by others in the firm.

1.3 Quality Assurance/Quality Control Functions

Bolton & Menk has developed and implemented a comprehensive Quality Assurance and Quality Control (QA/QC) Program that is designed to meet the particular needs of our firm and our clients. Our program systematically and dramatically reduces the potential for issues. Routine product reviews are an integral part of the quality control process, which effectively target conceptual, constructability, environmental impact, public impact, and economic engineering issues.

Task 1 Deliverables: Biweekly Communications, Progress Reports and Invoicing, Cost and Schedule Updates, Meeting Scheduling, QA/QC

Task 2: Public and Agency Involvement

Our team will develop and lead an effective and appropriately scaled public involvement plan. An effective public process develops an understanding of values, expectations, and specific desired outcomes of the public, while incorporating those elements into the project. It also effectively communicates to manage public expectations in alignment with agency responsibilities and actions.

The purpose of the following meetings is to update stakeholders on project decisions made to date and gain input for the council's use in making final decisions. The number of meetings listed is felt to be a starting point; however, staff and/or council may feel additional meetings are indicated based on the outcome of planned meetings. We recommend this approach based on the limited (though earnest) participation in meetings observed during the previous phase. Additional meetings can easily be added on request at the rates per meeting provided at the bottom of the Detailed Cost Estimate.

2.1 Project Management Team (PMT) Meetings

The primary meeting group for this project will be the Project Management Team (PMT). The PMT is comprised of the project representatives from the City of Elko New Market and Scott County. Bolton & Menk will facilitate monthly meetings with the PMT. The purpose is to understand individual agency perspectives to gain insight relative to key issues or perceived impacts, discuss potential mitigation strategies to minimize negative impacts, and identify considerations that could influence the project's conclusion. Up to four PMT meetings are expected and included in the not-to-exceed fee.

2.2 Property Owner Meetings

Conceptual design efforts were sensitive to land use during and after construction. Bolton & Menk will continue communication with those that have direct impacts, access modifications, or perceived impacts to their property in order to keep the project progressing. We've included one meeting with the southeast quadrant ownership group by our team along with City staff in the not-to-exceed fee.

2.3 Stakeholder Meetings

Our team will continue to build the relationships with downtown businesses group stakeholders and the Chamber of Commerce. We will continue to gain input on the downtown lighting plan by having direct discussions with individuals on potential issues and opportunities. We've included time for one meeting with the project stakeholders in the not-to-exceed fee.

2.4 Public Open House

Introducing a roundabout to a high-speed, rural location such as CSAH 2 and CSAH 91 will require effort in educating and familiarizing the public to the driving requirements of a roundabout. While single-lane roundabouts are gaining public acceptance throughout Minnesota, multi-lane roundabouts have gained public attention, in some circumstances for the wrong reasons. The proposed roundabout is a partial multi-lane roundabout. If the public is not readily aware of what to expect and is not clear on how to navigate the intersection, the result can be negative public sentiment or press coverage, regardless of sound design techniques.

A public open house that is built specifically to mitigate the known questions and concerns often associated with multi-lane roundabouts will help to address the public education needs and public relations integral to this project.

Additionally, we will gain feedback regarding lighting, trail connections and other potential landscaping amenities from the public.

2.5 Project Outreach

The project will be highlighted on the City's Facebook page. Our team will provide all the necessary content to the City to serve as a clearing house for all the project information. Content will be updated as needed through the project.

2.6 Concept Renderings (Optional)

This is a low cost option to develop visuals that aid in understanding project concepts. Bolton and Menk will prepare simple and aesthetic visual renderings of the design layout to aid in communicating the concepts to agencies and the public. We anticipate choosing three locations for renderings. Choosing this option would increase the not-to-exceed fee by \$2,324.00.

2.7 Corridor Fly-Over (Optional)

Bolton and Menk will develop a visually accurate and appealing video for use in communicating the preferred

corridor alternative to agencies and the public. This optional task includes a drone fly-over of the existing corridor. Choosing this option would increase the not-to-exceed fee by \$10,102.

Task 2 Deliverables: Meeting Agendas and Minutes, Open House Summary, Displays, Graphics, Presentations, and Online Content, Concept Renderings (Optional), Corridor Fly-Over (Optional)

Task 3: Geotechnical Studies

Our team will coordinate with a geotechnical subconsultant Braun Intertec to complete a geotechnical evaluation to design pavement sections, review earthwork requirements, and understand drainage opportunities. We will propose recommended drilling locations based on detailed examination of the site and anticipated design requirements. Braun's work will include traffic control, permitting, penetration test borings, borehole abandonment, sample review and laboratory testing, and reporting. An estimated fee of \$8,500 has been included as part of this proposal for the completion of the geotechnical study.

Task 3 Deliverables: Maps, Boring Logs, Laboratory Tests and Results, Geotechnical Report

Task 4: Surveying and Mapping

Our team will collect all data necessary to evaluate the design and impacts. Initial topographic survey was completed during the roundabout concept design phase of the project. Additionally, accurate ROW is currently available for the properties adjacent to the roundabout. We will complete the topographic survey required for the preliminary and final design phase of the project, including:

- CSAH 2, ~ 600 feet west of CSAH 91
- CSAH 2, ~ 500 feet east of CSAH 91
- South side of CSAH 2 from CSAH 91 to France Avenue (for CSAH 91 Shared Use Path)
- East side of CSAH 91 from CSAH 2 to Aaron Drive (for CSAH 2 Shared Use Path)

Our team will tailor additional topographic needs to those areas not already obtained previously.

Task 4 Deliverables: Topographic Base Mapping Information

Task 5: Utility Coordination

5.1 Gopher One Coordination

Gopher One coordination will be completed prior to any topography survey. Any maps and private utility information we receive will be shared with the City and County. Gopher One coordination will follow through final design as required through the federal process.

5.2 Utility Coordination

Our team will coordinate with utility owners within the project area to ensure a complete and accurate set of construction plans comply with MnDOT State/Federal Aid and State statutes in order to avoid unnecessary project delays and costs during construction.

5.3 Utility Coordination Meetings

Bolton & Menk will facilitate one Utility Coordination Meetings at the 30% stage (completed Geometric Layout). The purpose of the meetings are to confirm the location of all utilities within the corridor, identify all future improvements planned by each utility, and develop a strategy to incorporate this work into construction phasing. A utility layout with all known existing utilities and possible proposed utilities will be supplied. Following these meetings, Bolton & Menk will make sure all Utility Relocation Certificates will be completed as needed per the Delegated Contract Process (DCP) process.

Task 5 Deliverables: Private Utility Relocation Plans, Utility Layout, Utility Tabulations, Utility Meetings

Task 6: Environmental Documentation

Our team will prepare and submit the cultural review request and the state and federal threatened and endangered species requests. We will prepare the Project Memorandum as required that includes identification of needs and deficiencies; consideration of potential social, economic, and environmental project impacts; evaluation of the avoidance of potential impacts; documentation of the analysis and agency correspondence; and statement of design standards, elements, and exceptions (should there be any).

Task 6 Deliverables: Early Agency Coordination, Project Memorandum

Task 7: Preliminary Design

7.1 Roundabout Justification Report (RJR)

Bolton & Menk will prepare a RJR in accordance with the MnDOT State Aid Roundabout Guide. Due to this

roundabout being proposed on the State Aid system and having to follow the Delegate Contract Process (DCP), this report is required for District State Aid approval. This report, with the use of traffic modeling and existing crash data, will further justify a roundabout is the most logical and economical solution for this intersection.

7.2 Preliminary Drainage Design

Our team will assess existing surface water management features. We will identify any impacts as well as potential stormwater treatment locations. Drainage areas and major structures will be mapped and patterns will be understood. Our team will determine what structures, ponding, and erosion control measures will be needed on the project. All surface water management will follow the Scott County Watershed Management Organization standards and regulations.

7.3 Evaluate Potential Construction Staging/Detour Plan

During the geometric design process, an analysis as to how this roundabout will be constructed will be completed. Bolton & Menk will estimate project working days, create concept staging figures, devise detour routes, and determine if staging and/or a detour is the correct application for this project.

7.4 Prepare Geometric Layout

A geometric layout will be developed to move the project to a 30% design level and ready for final design. This will include the development of plan, profile, cross sections, and drainage considerations. In addition, property impacts, sight line reviews, and pedestrian accommodations, will be analyzed during this task.

7.5 Prepare Lighting Layout

A complete photometric analysis will be completed for the project area. The lighting layout will establish the types of pole fixtures and lighting units and determine the placement of all features including the utilities.

7.6 Identify Right-of-Way Needs

From the completion of the geometric layout and the staging/detour analysis, we will determine the right-of-way needs in order to construct this project.

7.7 Cost Estimates

An engineer's cost estimate will be prepared with the final completion of the geometric layout. Any additional concept costs will be completed on an as needed basis.

7.8 Peer Review

Bolton & Menk will hire a firm agreed upon by both the City and County to perform a complete roundabout review of the geometric layout. A peer review report will be completed and shared with the City and County. An estimated fee of \$8,000 has been included as part of the proposals for the completion of the peer review.

Task 7 Deliverables: RJR, Cross Sections, Profiles, Typical Sections, Preliminary Drainage Plan, Cost Estimates, Right-of-Way Limits, Construction Limits, Geometric Layout, Lighting Layout, Peer Review Report

Project Schedule

Tasks	2018					2019
	Aug	Sept	Oct	Nov	Dec	Jan
Project Management/Agency Involvement						
1.0 Project Management						
2.0 Public and Agency Involvement						
2.1 PMT Meetings (4 mtgs)	X		X	X		X
2.2 Property Owner Meetings (1 mtg)					X	
2.3 Stakeholder Meetings (1 mtg)					X	
2.4 Public Open House (1 mtg)						X
2.5 Project Outreach						
Preliminary Design						
3.0 Geotechnical Studies						
4.0 Surveying and Mapping						
5.0 Utility Coordination						
5.1 Gopher One Coordination						
5.2 Utility Coordination						
5.3 Utility Coordination Meetings (1 mtg)					X	
6.0 Environmental Documentation						
6.1 Early Coordination						
6.2 Social, Economic, and Environmental Impact						
6.3 Draft Project Memorandum						
6.4 Final Project Memorandum						
7.0 Preliminary Design						
7.1 Roundabout Justification Report (RJR)						
7.2 Preliminary Drainage Design						
7.3 Evaluate Potential Construction Staging/Detour Plan						
7.4 Prepare Geometric Layout						
7.6 Identify Right-of-Way Needs						
7.7 Cost Estimates						
7.8 Peer Review						

Environmental Clearance

ROW Needs Identified

DETAILED COST ESTIMATE

Client: Elko New Market		BOLTON & MENK, INC.						
Project: CSAH 2/ CSAH 91 Roundabout								
Task No.	Work Task Description	Project Manager	Principal/ QA-QC Manager	Design Engineer	Technician	Planner/GIS Specialist	Clerical	Totals

Project Management/Agency Involvement	1.0 Project Management							
	1.1 Administration	4	2				8	14
	1.2 General Coordination	6	2					8
	1.3 Quality Assurance/Quality Control Functions	2	4					6
	SUBTOTAL HOURS - TASK 1	12	8	0	0	0	8	28
	2.0 Public and Agency Involvement							
	2.1 PMT Meetings (4 mtgs)	4	4	4				12
	2.2 Property Owner Meetings (1 mtg)	2		1				3
	2.3 Stakeholder Meetings (1 mtg)	2		1				3
	2.4 Public Open House (1 mtg)	2	1	4				7
2.5 Project Outreach	2				8		10	
2.6 Concept Renderings (Optional)	1		12	8			21	
2.7 Corridor Fly-Over (Optional)	4	2	60	24			90	
SUBTOTAL HOURS - TASK 2	17	7	82	32	8	0	146	
Preliminary Design	3.0 Geotechnical Studies							
	3.1 Soil Borings	1		2	1			4
	3.2 Engineering Analysis and Reports	1		2	1			4
	SUBTOTAL HOURS - TASK 3	2	0	4	2	0	0	8
	4.0 Surveying and Mapping							
	4.1 Surveying and Mapping			6	24			30
	SUBTOTAL HOURS - TASK 4	0	0	6	24	0	0	30
	5.0 Utility Coordination							
	5.1 Gopher One Coordination	1			2		2	5
	5.2 Utility Coordination	4		8	4		2	18
	5.3 Utility Coordination Meetings (1 mtg)	2		4				6
	SUBTOTAL HOURS - TASK 5	7	0	12	6	0	4	29
	6.0 Environmental Documentation							
	6.1 Early Coordination					8	2	10
	6.2 Social, Economic, and Environmental Impact				6	8		14
	6.3 Draft Project Memorandum			6		24	3	33
	6.4 Final Project Memorandum	1				16	4	21
	SUBTOTAL HOURS - TASK 6	1	0	6	6	56	9	78
	7.0 Preliminary Design							
	7.1 Roundabout Justification Report (RJR)	2	1	2	4			9
7.2 Preliminary Drainage Design	2		14	10			26	
7.3 Evaluate Potential Construction Staging/Detour Plan	4		8	8			20	
7.4 Prepare Geometric Layout	2	1	8	12			23	
7.5 Prepare Lighting Layout	2	1	2	4			9	
7.6 Identify Right-of-Way Needs	2	1	4	8			15	
7.7 Cost Estimates	6	1	16				23	
7.8 Peer Review	2	6				2	10	
SUBTOTAL HOURS - TASK 7	22	11	54	46	0	2	135	

DETAILED COST ESTIMATE

Client: Elko New Market Project: CSAH 2/ CSAH 91 Roundabout		BOLTON & MENK, INC.							
Task No.	Work Task Description	Project Manager	Principal/ QA-QC Manager	Design Engineer	Technician	Planner/GIS Specialist	Clerical	Total Hours	Total Cost

Project Management/Agency Involvement

1.0	Project Management	12	8	0	0	0	8	28	\$3,736
2.0	Public and Agency Involvement	12	5	10	0	8	0	35	\$4,439

Project Management Subtotal: \$8,175

Preliminary Design

3.0	Geotechnical Studies	2	0	4	2	0	0	8	\$936
4.0	Surveying and Mapping	0	0	6	24	0	0	30	\$3,252
5.0	Utility Coordination	7	0	12	6	0	4	29	\$3,276
6.0	Environmental Documentation	1	0	6	6	56	9	78	\$7,674
7.0	Preliminary Design	22	11	54	46	0	2	135	\$16,077

Preliminary Design Subtotal: \$31,215

Total Hours	56	24	92	84	64	23	343
AVERAGE HOURLY RATE	\$140.00	\$175.00	\$110.00	\$108.00	\$98.00	\$82.00	
SUBTOTAL	\$7,840	\$4,200	\$10,120	\$9,072	\$6,272	\$1,886	

Bolton & Menk Subtotal: \$39,390

SUBCONSULTANT (Braun Intertec) (Geotech. Evaluation)	\$8,500
SUBCONSULTANT (TBD) (Peer Review)	\$8,000

TOTAL FEE	\$55,890
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Optional Task

2.6	Concept Renderings (Optional)	1	0	12	8	0	0	21	\$2,324
2.7	Corridor Fly-Over (Optional)	4	2	60	24	0	0	90	\$10,102

COST PER MEETING: To be used to determine final compensation for the following meeting types:

- Project Management Team Meeting - \$400 to \$600	- Property Owner Meeting - \$300 to \$500
- Stakeholder Meeting - \$300 to \$500	- Public Open House Meeting - \$900 to \$1,100
- Utility Coordination Meeting - \$600 to \$800	

**ELKO NEW MARKET PARKS COMMISSION
TUESDAY, JUNE 12, 2018
REGULAR MEETING MINUTES**

PRESENT:

Present at Roll Call were Commissioner Zahratka; Commissioner Dornseif; Commissioner Miller and Chair Mike Sutton. Also present were Assistant City Administrator Mark Nagel and Mayor Bob Crawford.

CALL TO ORDER:

The meeting was called to order at 4:04 PM in Conference Room B at Elko New Market City Hall, 601 Main Street.

APPROVE AGENDA:

Mr. Nagel said that there was 1 additional item for the June Meeting Agenda. On motion by Chair Sutton, seconded by Commissioner Zahratka, the June Meeting Agenda was approved with the additional item of Review Christmas Pines proposal on using land to pay for Park Dedication fees.

CITIZEN COMMENTS:

There were no citizens present at the May Parks Commission Meeting to make comments to the Parks Commission.

**APPROVAL OF MINUTES OF APRIL 10, 2018 PARKS
COMMISSION MEETING:**

Upon motion by Commissioner Zahratka; seconded Chair Sutton, the Parks Commission Unanimously approved the April 10, 2018 Parks Commission Meeting Minutes as printed.

APPROVAL OF MINUTES OF MAY 10, 2018 PARKS COMMISSION MEETING:

Upon motion by Commissioner Dornseif; seconded by Commissioner Zahratka, the Parks Commission unanimously approved the May 10, 2018 Parks Commission Minutes as printed.

PETITIONS, REQUESTS, AND COMMUNICATIONS:

Mr. Nagel reviewed the attached article from the Lonsdale Review and New Prague Times on the recent ribbon cutting for Pete's Hill with Commissioners noting that it had been a success. Mayor Crawford added that he hoped the SMSC would consider another program that would enable more trails to be paved.

UPDATES:

Mr. Nagel reviewed the May 30, 2018 ENM Parks Commission Update, which contained 25 items, with the Commissioners.

Chair Sutton reported that the CCEC's focus is on Fire Rescue Days, which is coming up beginning on June 21st.

Mr. Nagel called the Commissioner's attention to the attached copy of the Fire Rescue Days events.

OLD/NEW BUSINESS:

Mr. Nagel handed out a Memo from Jessica Davidson regarding the tentative "lineup" for the Summer Family Fun Nights at the Wagner Park Shelter. Once again, he said, there will be 7 events – one of which is in support of Night to Unite" – on Thursday evenings. The total cost, he noted, will be around \$3,000, including the Coordinator's time and expenses. He also thanked Administrative Assistant Stephanie Schultz for doing a great job on the flyer announcing the events. Upon motion by Commissioner Zahratka; seconded by Commissioner Miller, the Parks Commission unanimously approved the Summer Programs at the Wagner Park Shelter on Thursday evenings.

Mr. Nagel called Commissioner's attention to an email from Leiviska Golf Design offering to design and build a disc golf course in Elko New Market at Windrose Park. Mr. Nagel said that he met with the company and said that the course would cost \$8,100, plus some brush clearing by the City. Consensus of the Parks Commissioners was that they were interested in the project, but asked Mr. Nagel to bring back a course design to review at the July Parks Commission meeting. No further action was taken.

Mr. Nagel handed out a Memo from Jessica Davidson regarding the tentative "lineup" for the Summer Family Fun Nights at the Wagner Park Shelter. Once again, he said, there will be 7 events – one of which is in support of Night to Unite" – on Thursday evenings. The total cost, he noted, will be around \$3,000, including the Coordinator's time and expenses. Consensus of those Commissioners present was to move forward in scheduling the events with consideration of final approval at the June Parks Commission Meeting.

Parks Commission members present reviewed the Dakota Acres, First Addition subdivision plan. The consensus of the Parks Commission was that they would like to have a trail easement around the pond for a future trail that would connect with the trail easement on the other side of the pond and were open to options as to where the easement for the trail would be placed to get to the pond. Mr. Nagel said that the developer and the City Engineer had not provided comments on the preference of the Parks Commission to date. He said that he would bring back results at planned Special Meeting of the Parks Commission on June 26th. No further action was taken.

Mr. Nagel reviewed the Sylvester Meadows Concept Plan using the Staff Report for the proposed subdivision. After discussion of the report, a motion was made by Chair Sutton and seconded by Commissioner Miller to concur with the recommendation made by the Community Development Specialist to accept land remnant, if any, surrounding the wetland area as Park Dedication credit as they would abut existing Mahowald Park, and that any additional Park Dedication requirement, if any, be fulfilled by cash contribution to the Park Dedication fund. Further, that a future trail location through the development be planned for consistent with the City's Park and Trail Plan. Motion passed unanimously.

Mr. Nagel said that the City Staff was requesting comments from the Parks Commission regarding the acceptance of a piece of property of about 7.5 acres off of Dakota Avenue at the City's northern boundary instead of the approximately \$40,000 in Park Dedication fees for the Christmas Pines subdivision to be

developed at the corner of CSAH 2 and CSAH 2. Parks Commissioners discussed the proposal at length with the consensus being that they would consider such a proposal, if made and subject to acceptable terms and conditions.

Mr. Nagel reviewed the 2019 Parks Department Budget with the Commissioners noting that it was nearly the same as it was in 2018. He will continue to provide further updates as the 2019 Budget process continues.

Mr. Nagel presented the Findings from the recent 2018 Community Survey conducted The Morris Leatherman Company. He said that the results showed that the City was “in the top 3 of exurban communities” in satisfaction with park facilities and “in the top 5 communities in the Greater Metropolitan Area” in satisfaction with recreational programming. He asked Commissioners to review the document for further discussion at the July Parks Commission Meeting. No further action was taken.

Mr. Nagel presented the Bill List to the Commissioners – Schlomka’s Portable Restrooms for \$710.00. Upon Motion by Commissioner Miller; seconded by commissioner Dornseif, the parks Commission unanimously approved the Bill List as presented.

OTHER BUSINESS:

There were no additional business items to come before the Parks Commission at the June 12th meeting.

NEXT MEETINGS:

The next meeting of the ENM Parks Commission was requested for Tuesday, June 26, 2018. It is a Special Meeting to provide input on 2 subdivision proposals that are on the June 28th Planning Commission Agenda. On motion by Chair Sutton; seconded by Commissioner Miller, the Special Meeting was set for Tuesday, June 26th at 4 PM in Conference Room B of Elko New Market City Hall.

The next Regular Meeting for the Parks Commission was set for Tuesday, July 10, 2018 at 4:00 PM in Conference Room B of Elko New Market City Hall.

PARK COMMISSIONER COMMENTS:

There were no comments provided at the June Parks Commission Meeting by Parks Commissioners.

ADJOURNMENT:

There being no further business to come before the Parks Commission, the June Parks Commission meeting was adjourned by voice vote of Commissioners present, at 5:40 PM.

Respectfully Submitted,

Mark Nagel, Assistant City Administrator