



City of Grand Island

Tuesday, June 27, 2017

Council Session

Item F-1

**#9634 - Consideration of Vacation of a Portion of College Street;
Lafayette Avenue to Custer Avenue**

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Keith Kurz PE, Assistant Public Works Director

Meeting: June 27, 2017

Subject: Consideration of Vacation of a Portion of College Street;
Lafayette Avenue to Custer Avenue

Presenter(s): John Collins PE, Public Works Director

Background

Scarff's Addition to West Lawn Subdivision was platted in October 1888, with College Street as a public street within such subdivision.

The City has received a request from Grand Island Public Schools (GIPS) to vacate the portion of College Street within the borders of Grand Island High School. The vacation is needed at this time so that the school can fully develop plans for their new stadium.

Discussion

With a large investment being made for upgrades and improvements in Memorial Stadium, as well as to provide a safe atmosphere for Grand Island Senior High students walking to and from the school building to the stadium regularly it has been requested to close a portion of College Street, from Lafayette Avenue to Custer Avenue.

In September 2010, GIPS hired a local engineering consultant to study (attached) the effects of the closure of College between Custer and Lafayette. The street was closed for a period of one month from September to October 2010. Traffic turning movement counts as well as Average Daily Traffic (ADT) counts were observed at surrounding intersections and streets around the high school. The real-life closure allowed for actual shifts in travel patterns instead of relying solely on projections to redistribute College Street traffic to surrounding streets. Results of the study are consistent with what would be expected.

Seven (7) years have passed since data was collected with some network changes and some increase in traffic; this is expected to have little impact on the report's conclusions other than to add support for segregating traffic between arterials and local streets. One factor that was not included in the study is the anticipated 2021 5-Points intersection improvements that should have a positive impact on this area.

Upon review of this data, it was clear that some local streets in the area experienced higher traffic volumes. It was also determined that the operational performance of the streets and intersections studied, wasn't greatly improved or lowered due to the closure. Most traffic from College Street shifted south to State Street. It is possible with the recent expansion and improvements of Capital Avenue, more traffic would shift north to Capital Avenue than south to State Street. A more detailed study would be necessary to confirm this. There are no plans for such a study as moving traffic to Capital Avenue and State Street (the most accessible arterials) is desirable as it improves network safety and efficiency. Future effort may be needed to improve traffic on State Street as traffic volumes grow. While it may shift patterns, the closure of this single block of street that runs through the campus of GIPS is not anticipated to cause harm to the system of travel in this area.

Land use and traffic volume, have the greatest effect on determining a streets configuration. College Street is a local road passing through the Grand Island Senior High campus. The portion passing through the campus currently functions largely like a drive passing through a parking lot with pedestrians crossing from one part of the campus to another. This effect, along with pedestrian traffic, is anticipated to increase with the planned improvements. Public Works agrees that vacating the street would improve safety and is in the best interest of the community, provided the resulting pavement configuration does not permit vehicles to continue move through the campus from Custer Avenue to Lafayette Avenue.

With the continued development of Grand Island, the high school is experiencing growth in student population. With this, more students are crossing this street for parking and athletic facilities on the opposite side of the street from the main school building. The closure of this street will make for a safer campus environment for not only the students, but the faculty and general public that attends events at the high school.

An easement will be retained to allow for access to existing City utilities within this section of College Street.

Comments/concerns from City Police and Fire Departments regarding this requested closure are attached for reference.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

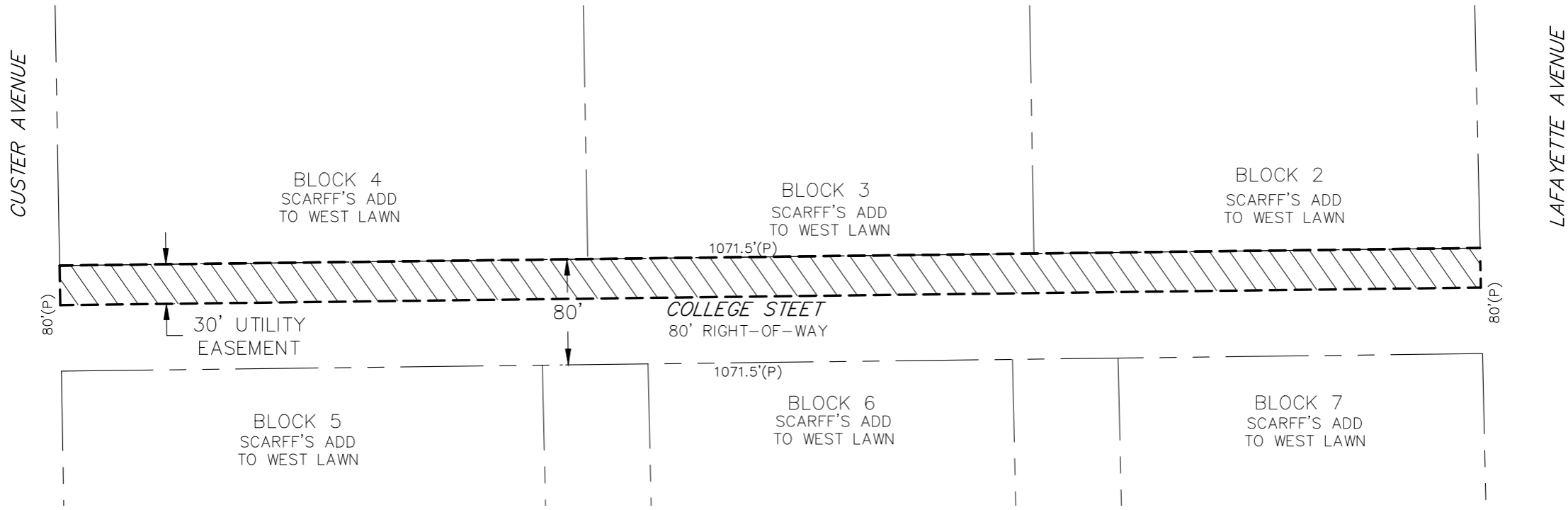
Recommendation

City Administration recommends that the Council approve vacating College Street from Lafayette Avenue to Custer Avenue as requested.

Sample Motion

Move to approve the ordinance.

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 DATE: Jun 19, 2017 8:55am
 USER: jjimenez
 0122514_xbase
 topo-track
 081395_xtopo-GISH
 0101279_xbase



30' UTILITY EASEMENT DESCRIPTION

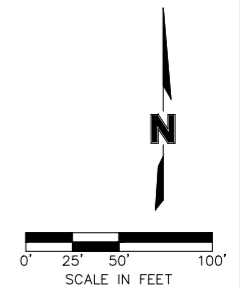
A TRACT OF LAND LOCATED IN PART OF SCARFF'S ADDITION TO WEST LAWN, CITY OF GRAND ISLAND, HALL COUNTY, NEBRASKA, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE SOUTH THIRTY (30) FEET OF COLLEGE STREET BETWEEN THE EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE AND THE WEST RIGHT-OF-WAY LINE OF LAFAYETTE AVENUE.

SAID EASEMENT CONTAINS A CALCULATED AREA OF 32,280 SQUARE FEET OR 0.74 ACRES MORE OR LESS.

LEGEND

- UTILITY EASEMENT AREA
- EXIST. PROPERTY LINE
- UTILITY EASEMENT LINE
- PLATTED DISTANCE



PROJECT NO:	2017-1626
DRAWN BY:	JMJ
DATE:	06-19-2017

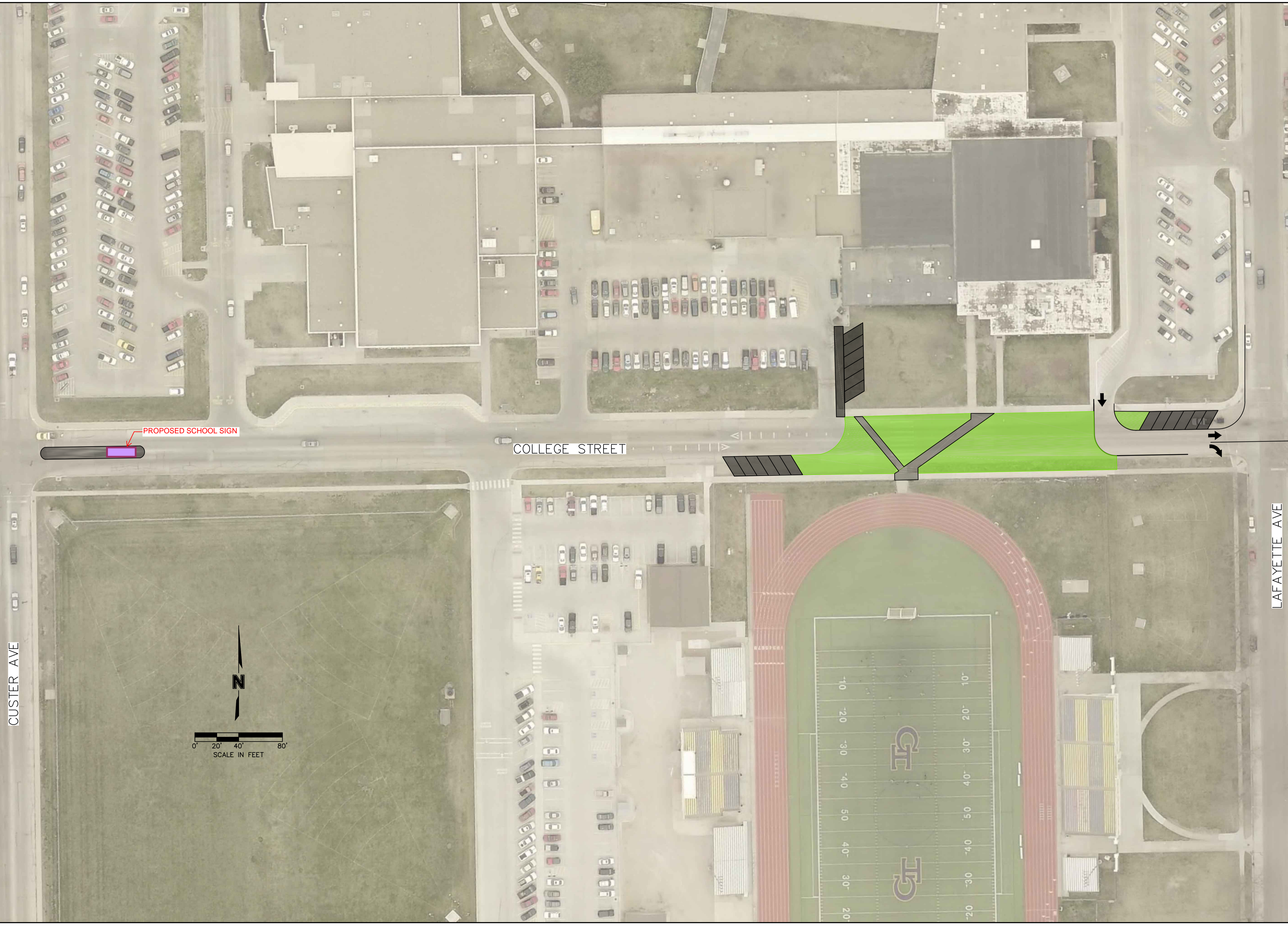
Council Session - 6/27/2017

201 East 2nd Street
 P.O. Box 1072
 Grand Island, NE 68802-1072
 TEL 308.384.8750
 FAX 308.384.8752

EXHIBIT
2

DWG: C:\Users\bdegen\Desktop\College Street\Layout 1.dwg USER: bdegen
 DATE: Jun 08, 2017 4:00pm XREFS:

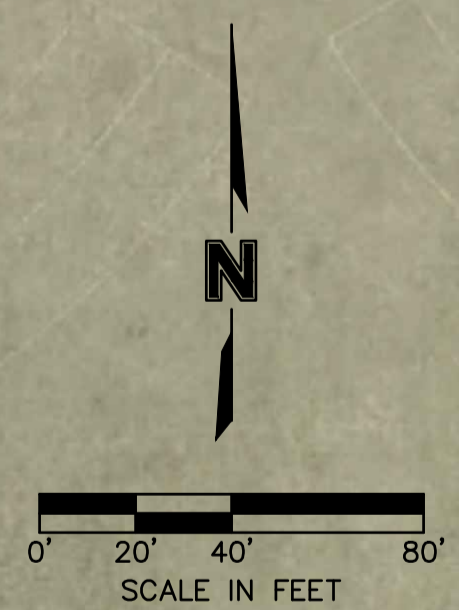
CUSTER AVE



PROPOSED SCHOOL SIGN

COLLEGE STREET

LAFAYETTE AVE



REV. NO.	DATE	REVISIONS DESCRIPTION

LAYOUT	2017
GIPS COLLEGE STREET	
GRAND ISLAND, NEBRASKA	

drawn by: _____
 checked by: _____
 approved by: _____
 project no.: _____
 drawing no.: _____
 date: _____

SHEET

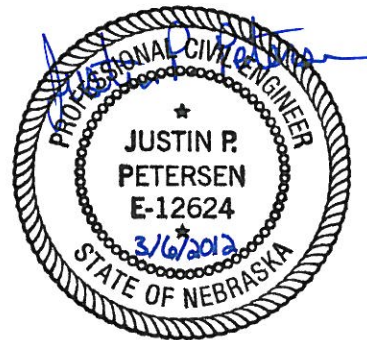
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**COLLEGE STREET CLOSURE ANALYSIS
GRAND ISLAND, NEBRASKA**

TRAFFIC IMPACT STUDY

PREPARED FOR

GRAND ISLAND PUBLIC SCHOOLS



MARCH 2012

OA PROJECT No. 009-0622

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**COLLEGE STREET CLOSURE ANALYSIS
GRAND ISLAND, NEBRASKA**

TRAFFIC IMPACT STUDY

PREPARED FOR

GRAND ISLAND PUBLIC SCHOOLS

MARCH 2012

OA PROJECT No. 009-0622

1.0 INTRODUCTION AND OBJECTIVE

This report documents results of traffic analyses conducted to identify changes in driving patterns and impacts to the surrounding roadway network that would be associated with a potential closure of College Street from just east of the existing Grand Island Senior High faculty parking lot west access to Lafayette Avenue. In order to reduce the use of engineering assumptions in the analysis, the City of Grand Island replicated the limits of this potential closure from September 12, 2010 to October 17, 2010 using approved traffic control devices. College Street is an east/west collector roadway in Grand Island, Nebraska.

Two separate traffic conditions were analyzed as part of this study: Existing Traffic Conditions and Closure Conditions. A map showing the general location of the potential roadway closure and the study intersections for this analysis is illustrated in **Figure 1**.

2.0 DATA COLLECTION

The data collection effort included conducting peak hour turning movement counts, average daily traffic (ADT) counts, and documentation of current roadway geometrics and traffic control. The traffic data was collected from September through November of 2010.


2.1 Peak Hour Turning Movement Counts

Olsson Associates (OA) supervised the data collection effort of intersection turning movement counts conducted by individuals who had previously participated in a traffic count training session led by OA. Peak hour traffic counts were conducted at the following intersections:

- Forrest Street & Custer Avenue
- Forrest Street & Lafayette Avenue
- Forrest Street & Broadwell Avenue
- College Street & Custer Avenue
- College Street & Lafayette Avenue
- College Street & Broadwell Avenue
- State Street & Custer Avenue
- State Street & Lafayette Avenue
- State Street & Broadwell Avenue/Eddy Street (Five Points)

Existing turning movement counts were collected on September 8, 2010. Turning movement counts under Closure Conditions were collected on October 13, 2010, several weeks after the start of the closure to allow for new driving patterns to become established. The counts were conducted during the AM and PM peak periods of school traffic and adjacent street traffic flow (7:00am – 9:00am and 3:00pm – 6:00pm). The peak hour counts included heavy vehicle and pedestrian volume documentation at all count locations.

The City of Grand Island collected ADT counts at a combination of arterial, collector and neighborhood streets in the vicinity of the school while College Street was under temporary closure in October 2010 and again after College Street had been re-opened in November 2010. The ADT counts were collected on Capital Avenue, Forrest Street, Waugh Street, State Street, Sherman Boulevard, and Howard Avenue. In both cases, the ADT data was collected over a period of one week.

LEGEND	
	- Study Intersection



Capital Ave.

Forrest St.

College St.

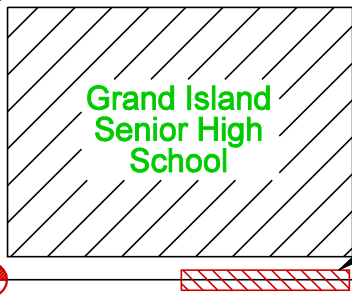
State St.

Custer Ave.

Lafayette Ave.

Broadwell Ave.

Eddy St.



Grand Island Senior High School



High School Sports Facilities & Parking Lot

Street Closure



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2.2 Field Review of Street Geometrics

A complete review of the existing roadway network including roadway type, general roadway geometrics, and traffic control device locations was completed as part of the data collection effort. Cross-section measurements and turn bay storage lengths were collected on each leg of the study intersections. To aid in the development of recommendations, a photographic inventory and field sketches of each intersection were included as part of the data collection task. Existing traffic signal timings for the intersections of State Street & Custer Avenue and the Five Points intersection were obtained from the City of Grand Island for use in the capacity analysis.

3.0 EXISTING TRAFFIC CONDITIONS

Existing traffic conditions were evaluated to identify any existing deficiencies and to provide a baseline for comparison purposes.

3.1 Existing Network Characteristics

Within the study area, Broadwell Avenue is currently a five-lane roadway with a two-way-left-turn-lane north of State Street. Broadwell Avenue has a posted speed limit of 35 mph north of College Street and 30 mph south of College Street. Forrest Street, College Street, State Street, Custer Avenue, and Lafayette Avenue are two-lane roadways with a posted speed limit of 25 mph in the study area. The intersection of State Street & Custer Avenue and the Five Points intersection are signalized. The remaining study intersections are unsignalized. The intersection of College Street & Custer Avenue currently operates as a four-way stop control intersection.

Existing lane configurations and traffic control measures for the study network are illustrated in **Figure 2**. The existing peak hour turn-movement volumes are illustrated in **Figure 3**.

3.2 Existing Conditions Capacity Analysis

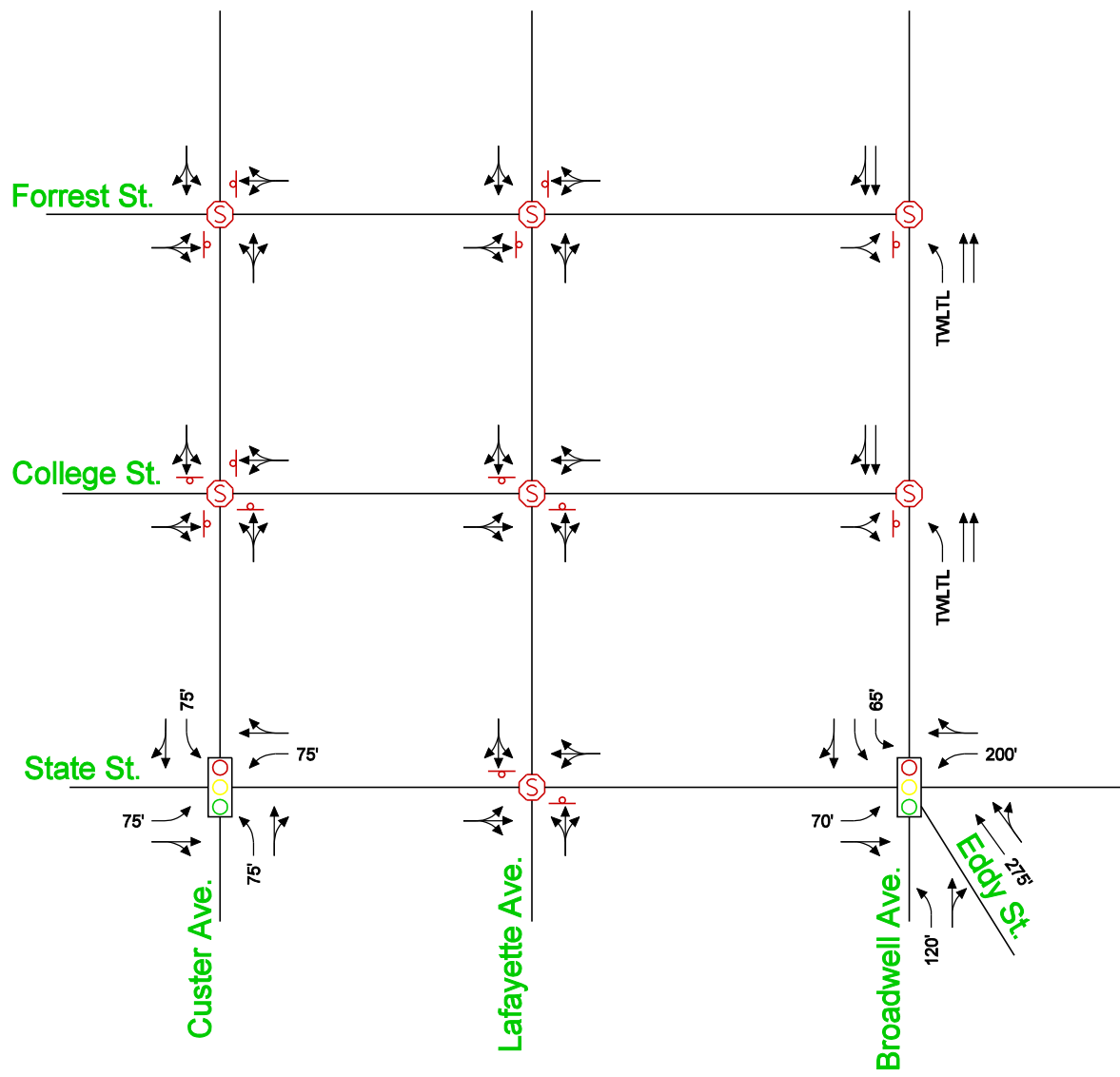
Capacity analyses were performed for all of the study intersections utilizing the existing lane configurations and traffic control. Analyses were conducted using Synchro, Version 7.0 which is based on the Highway Capacity Manual delay methodologies. For simplicity, the amount of control delay is equated to a grade or Level of Service (LOS) based on thresholds of driver acceptance. The amount of delay is assigned a letter grade A through F, LOS A representing little or no delay and LOS F representing very high delay. Table 1 and Table 2 show the delays associated with each LOS grade for unsignalized and signalized intersections, respectively.

TABLE 1: UNSIGNALIZED INTERSECTION LOS CRITERIA

Level-of-Service	Average Control Delay (sec)
A	≤ 10
B	> 10-15
C	> 15-25
D	> 25-35
E	> 35-50
F	>50
Highway Capacity Manual (HCM 2000)	

LEGEND

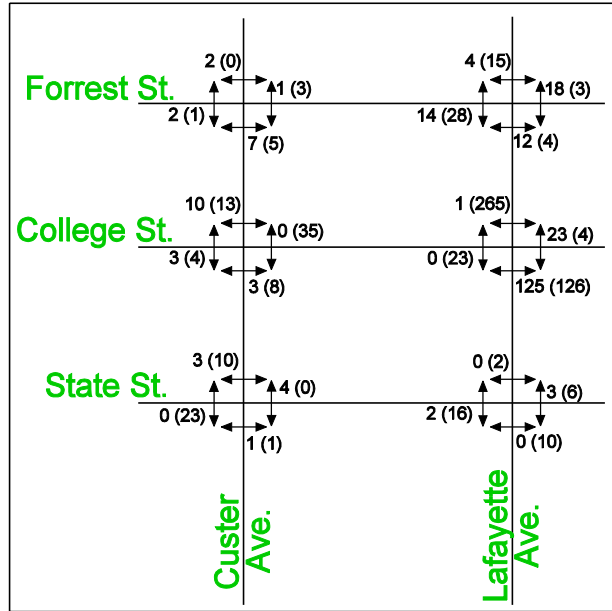
- Lane Configuration and Storage Length
- Signalized Intersection
- Stop Control Intersection
- Stop Sign
- Two Way Left Turn Lane



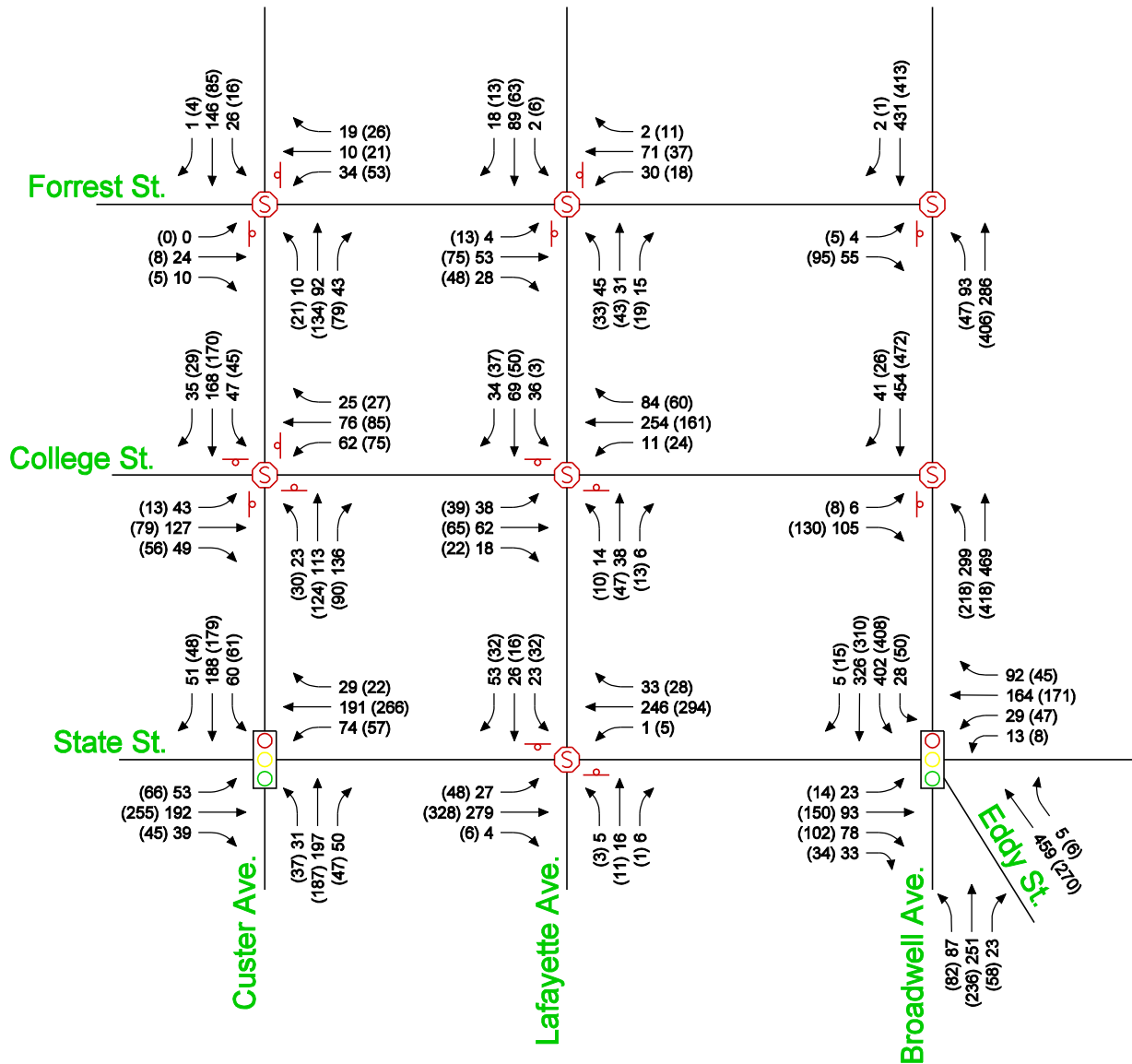
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LEGEND

- ↔ AM (PM) - Peak Hour Volume
- ⬆️ ⬆️ ⬆️ - Signalized Intersection
- Ⓢ - Stop Control Intersection
- Ⓢ - Stop Sign



Pedestrian Volumes - AM (PM)



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TABLE 2: SIGNALIZED INTERSECTION LOS CRITERIA

Level-of-Service	Average Control Delay (sec)
A	≤ 10
B	> 10-20
C	> 20-35
D	> 35-55
E	> 55-80
F	> 80
Highway Capacity Manual (HCM 2000)	

Results of the analyses indicate that the existing signalized intersection of State Street & Custer Avenue operates at LOS B during both peak periods. All individual movements at this intersection also operate at LOS B during the peak hours of operation. The Five Points intersection operates at LOS E and LOS D during the AM and PM peak hour periods, respectively. The southbound movement from Broadwell Avenue to Eddy Street operates at LOS F during both peak periods. The southbound through/right movement operates at LOS E during the AM peak hour. All other movements at this intersection operate at LOS D or better. In general, the fifth leg at this intersection results in non-typical geometrics and additional traffic movements that must compete for green time. As a result, when volumes increase during the peak hours of operation, individual movements may begin to experience breakdowns. This is most evident for southbound movements on Broadwell Avenue.

At the unsignalized intersection of Lafayette Avenue & College Street, northbound movements operate at LOS E during both peak periods. The southbound movements operate at LOS F during the AM peak hour and LOS E during the PM peak hour. The vehicle delays during the peak hours at this intersection are increased due to the east/west pedestrian volumes at this intersection. All other individual movements operate at LOS D or better during both peak periods.

No unsignalized intersections are expected to warrant signalization based on Manual on Uniform Traffic Control Devices (MUTCD) criteria. The Existing Conditions capacity analysis summary is illustrated in **Figure 4**. Detailed results may be found in Appendix A.

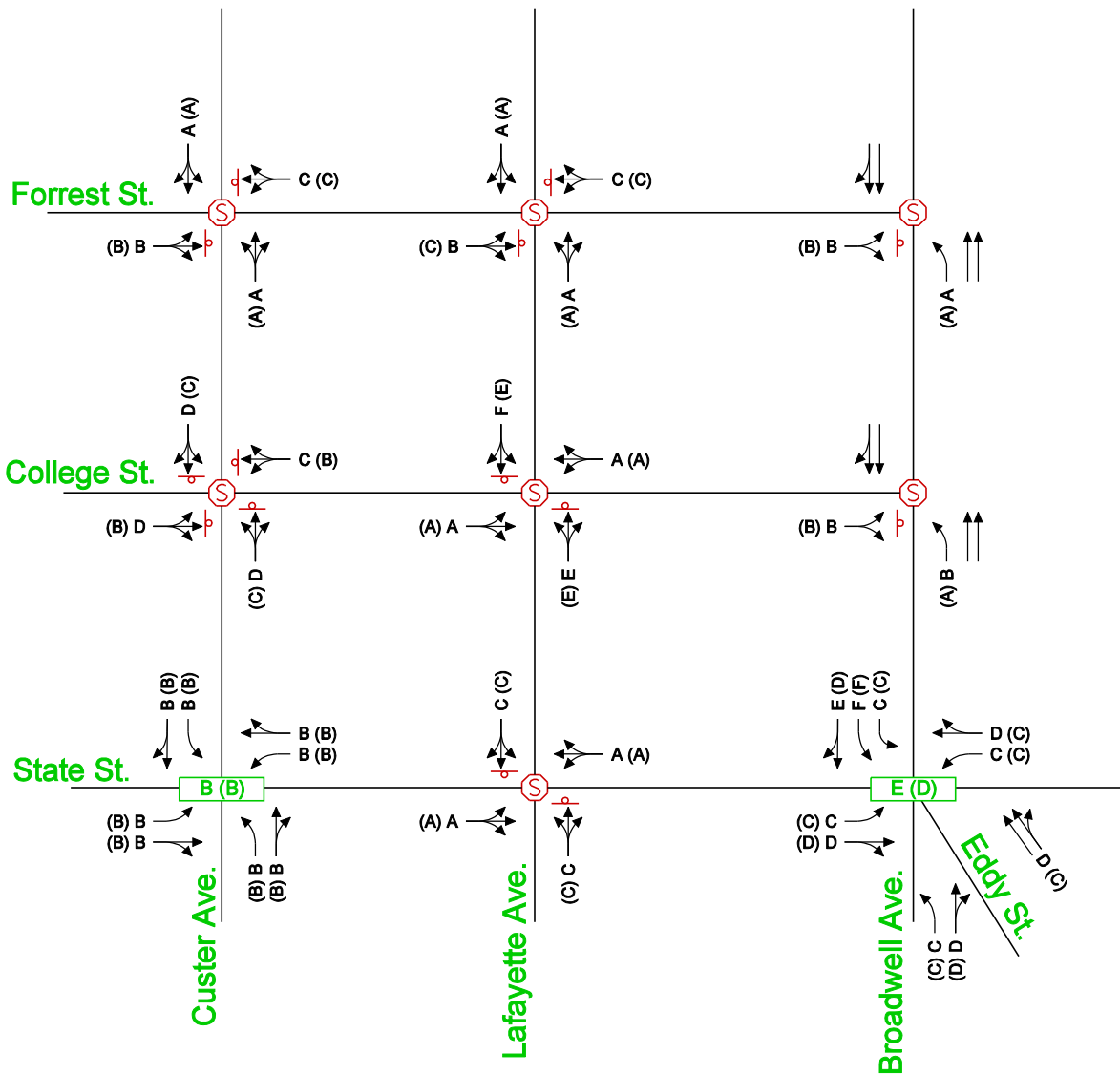
3.3 Existing Geometric Improvement Evaluation

Outside of capacity analysis results, the need for improvements at study intersections utilizing existing traffic volumes was evaluated further using two separate criteria. The first geometric improvement evaluation utilized the procedures of The National Cooperative Highway Research Program (NCHRP) Report 457 on evaluating intersection improvements. Using NCHRP 457 methods, the need for left-turn and right-turn lanes on the major road or a two-lane approach on the minor road was evaluated at all study intersections. No warrants for geometric improvement were satisfied at any of the study intersections based on NCHRP 457.

Storage lengths of existing turning lanes were also evaluated based on Nebraska Department of Roads (NDOR) Roadway Design Manual Chapter 4 methodologies. Based on this evaluation and queue reports from the capacity analysis software, storage length increases are recommended for several turning lanes at the intersection of State Street & Custer Avenue. These recommendations are for storage lengths only and do not include any taper or deceleration lengths.

LEGEND

-  - Movement LOS
-  - Stop Control Intersection
-  - Stop Sign
-  - Signalized Intersection LOS



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The following details each traffic improvement recommended for the study area. These recommended improvements to the existing roadway network are illustrated in **Figure 5**.

College Street & Lafayette Avenue

The delay currently being experienced by traffic at this intersection is primarily associated with the large east/west pedestrian volumes during the peak hours of operation. Pedestrian volumes at this intersection are larger than at any other intersection within the study area. Although a detailed crash history was not referenced for this intersection, in the interest of pedestrian safety, it is recommended that this intersection be converted to an all-way stop intersection by adding a stop sign on the eastbound and westbound approaches. This recommendation is based upon guidelines provided in the MUTCD that allow for consideration of all-way stop control at intersections near large pedestrian generators where entering vehicle volumes are relatively balanced on all approaches. The implementation of this improvement is expected to simplify the decision making process for both drivers and pedestrians, and a corresponding reduction in overall delay is anticipated.

State Street & Custer Avenue







Traffic currently operates at an acceptable level-of-service at this intersection during the peak hours. However, increases in turn lane storage lengths are proposed to provide sufficient storage and allow for thru vehicle spillback during the peak hours of operation.

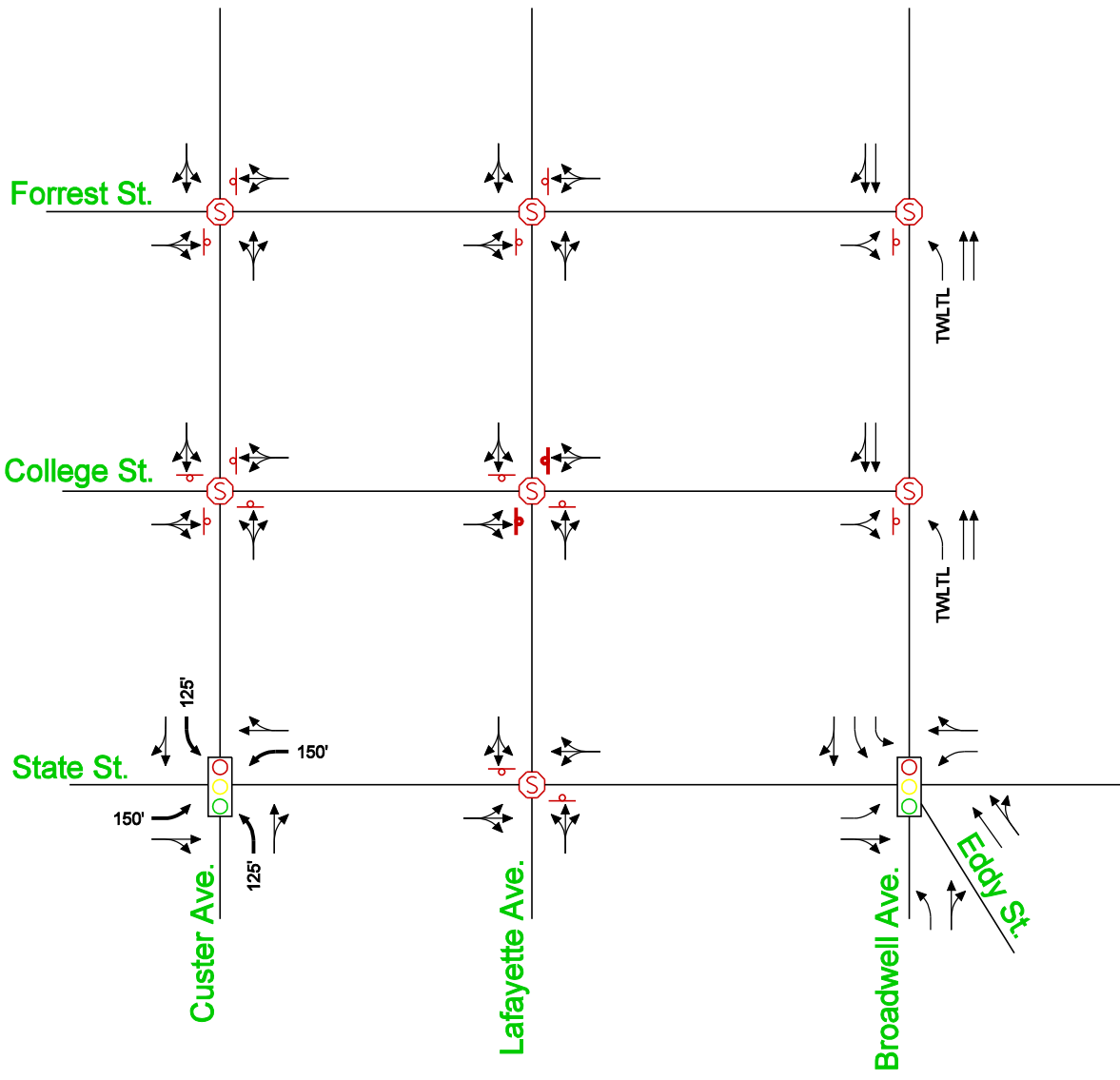
- Extend the eastbound left-turn lane from 75' to **150'**
- Extend the westbound left-turn lane from 75' to **150'**
- Extend the southbound left-turn lane from 75' to **125'**
- Extend the northbound left-turn lane from 75' to **125'**

Five Points intersection

Traffic operations at this intersection are currently undesirable during the peak hours of operation, specifically the southbound movements. Although large scale intersection geometric improvements would be required to correct many of the issues with this intersection, recommendations of that type would require additional analysis outside the scope of this traffic study. These improvements would likely include the addition of median, access control recommendations and possibly an alternate form of traffic control or elimination of movements at this intersection. However, a short term improvement that may result in improved operations would include adjustments to existing signal timings at this intersection.

LEGEND

-  - Recommended Modification
-  - Signalized Intersection
-  - Stop Control Intersection
-  - Existing Stop Sign
-  - Recommended Stop Sign
-  - Two Way Left Turn Lane



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4.0 CLOSURE CONDITIONS

Intersection turning movement counts were conducted again after the temporary closure of College Street was in place for several weeks in order to identify changes in driving patterns throughout the study area.

4.1 Closure Conditions Network Characteristics

College Street was temporarily closed from east of the existing Grand Island Senior High faculty parking lot west access to Lafayette Avenue. Temporary signs were placed on College Street near Custer Avenue during the closure to inform drivers that College Street was closed to through traffic.

Closure Conditions peak hour volumes are illustrated in **Figure 6**.

4.2 Closure Conditions Capacity Analysis

The closure of College Street had a noticeable impact to driving patterns throughout the study area. These changes will be discussed in greater detail in Section 5.0 of this report. However, the changing traffic patterns resulted in improved operations for many movements when compared to Existing Conditions. Notably, the intersection of College Street & Custer Avenue and the Five Points intersection which currently have undesirable operations in the peak hour, improved significantly under the Closure Conditions. There were also many minimal improvements of one letter grade throughout the study network. Individual movements throughout the network are also expected to see increased delays under the Closure Conditions, most notably at the intersections of Forest Street & Lafayette Avenue and State Street & Lafayette Avenue.

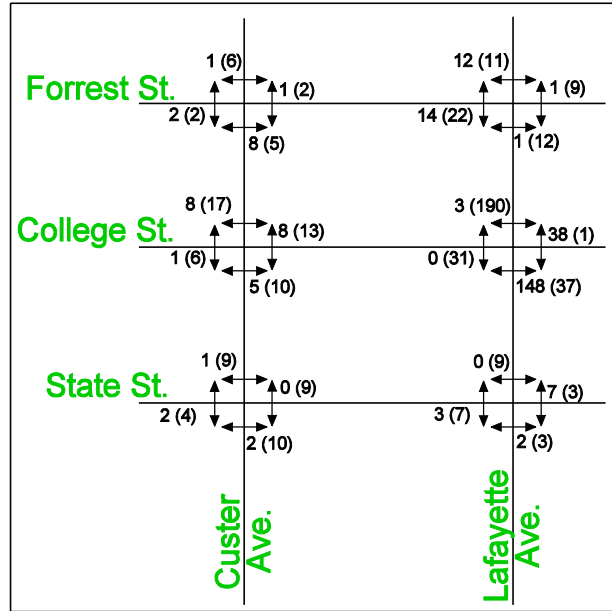
Results of the signalized intersection analysis indicate that both signalized intersections are expected to operate at LOS D or better during both peak periods. The only individual movement to experience increased delays at the Five Points intersection, when compared to Existing Conditions, is the northbound left-turn movement which is expected to operate at LOS E and D during the AM and PM peak hours, respectively. Overall delay at this intersection is expected to decrease under Closure Conditions, most notably on the southbound approach. Although increases in traffic volumes at the intersection of State Street & Custer Avenue under Closure Conditions are expected to increase delays for several movements when compared to Existing Conditions, the overall operations at this intersection are anticipated to be desirable.

Unsignalized intersection analysis results show increased delays on the minor legs of the intersections of Forrest Street & Lafayette Avenue and State Street & Lafayette Avenue. The westbound movement at Forrest Street & Lafayette Avenue is anticipated to operate at LOS E during the AM peak period. The northbound and southbound movements at State Street & Lafayette Avenue operate at LOS F during the AM peak period. The southbound movement at this intersection is expected to operate at LOS E during the PM peak period. Improvements in operations are expected under Closure Conditions for multiple approaches of the intersections of College Street & Custer Avenue and College Street & Lafayette Avenue.

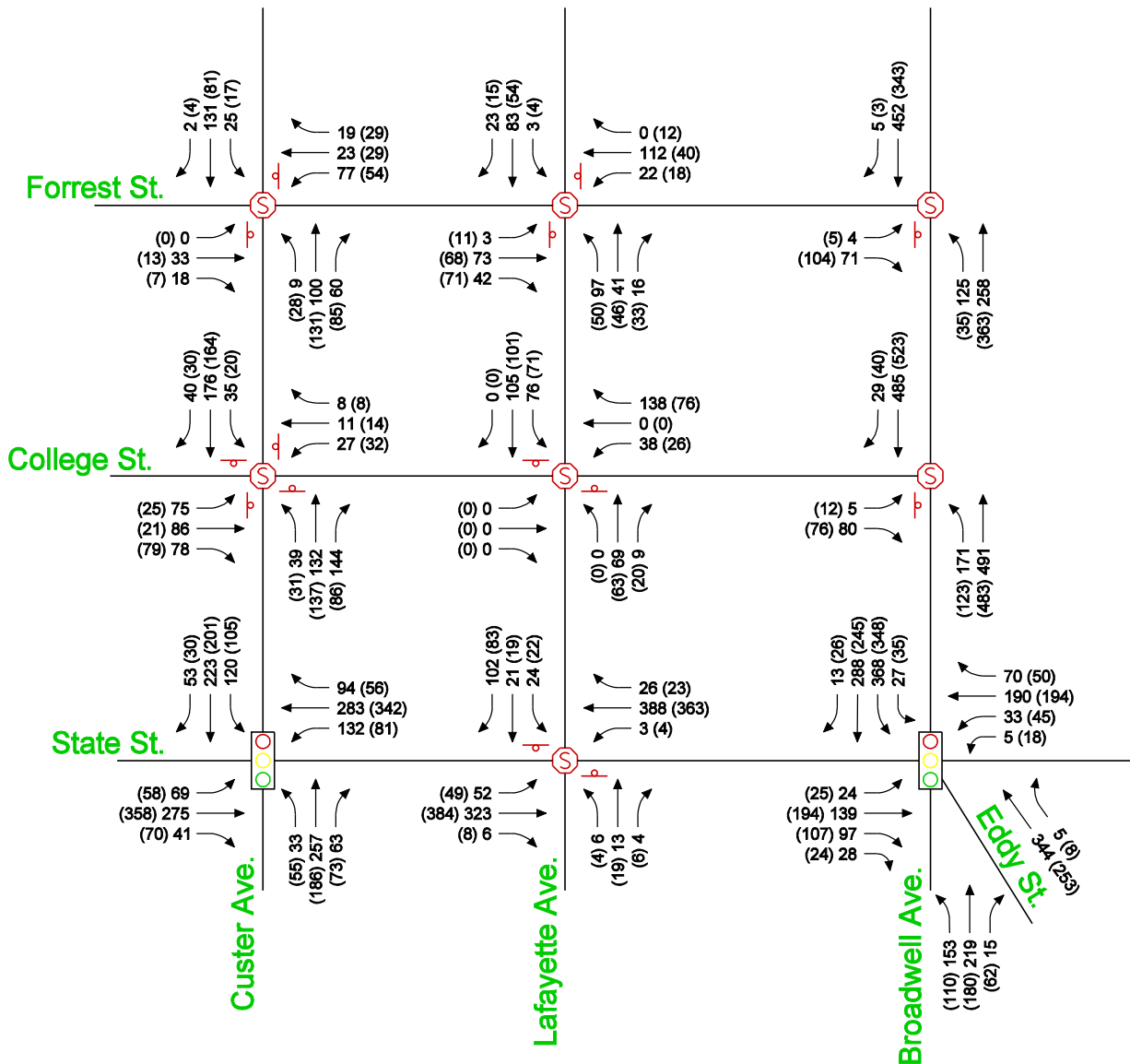
No unsignalized intersections are expected to warrant signalization based on MUTCD criteria. The Closure Conditions capacity analysis summary is illustrated in **Figure 7**. Detailed results may be found in Appendix B.

LEGEND

- ↔ AM (PM) - Peak Hour Volume
- 🚦 - Signalized Intersection
- Ⓢ - Stop Control Intersection
- Ⓣ - Stop Sign







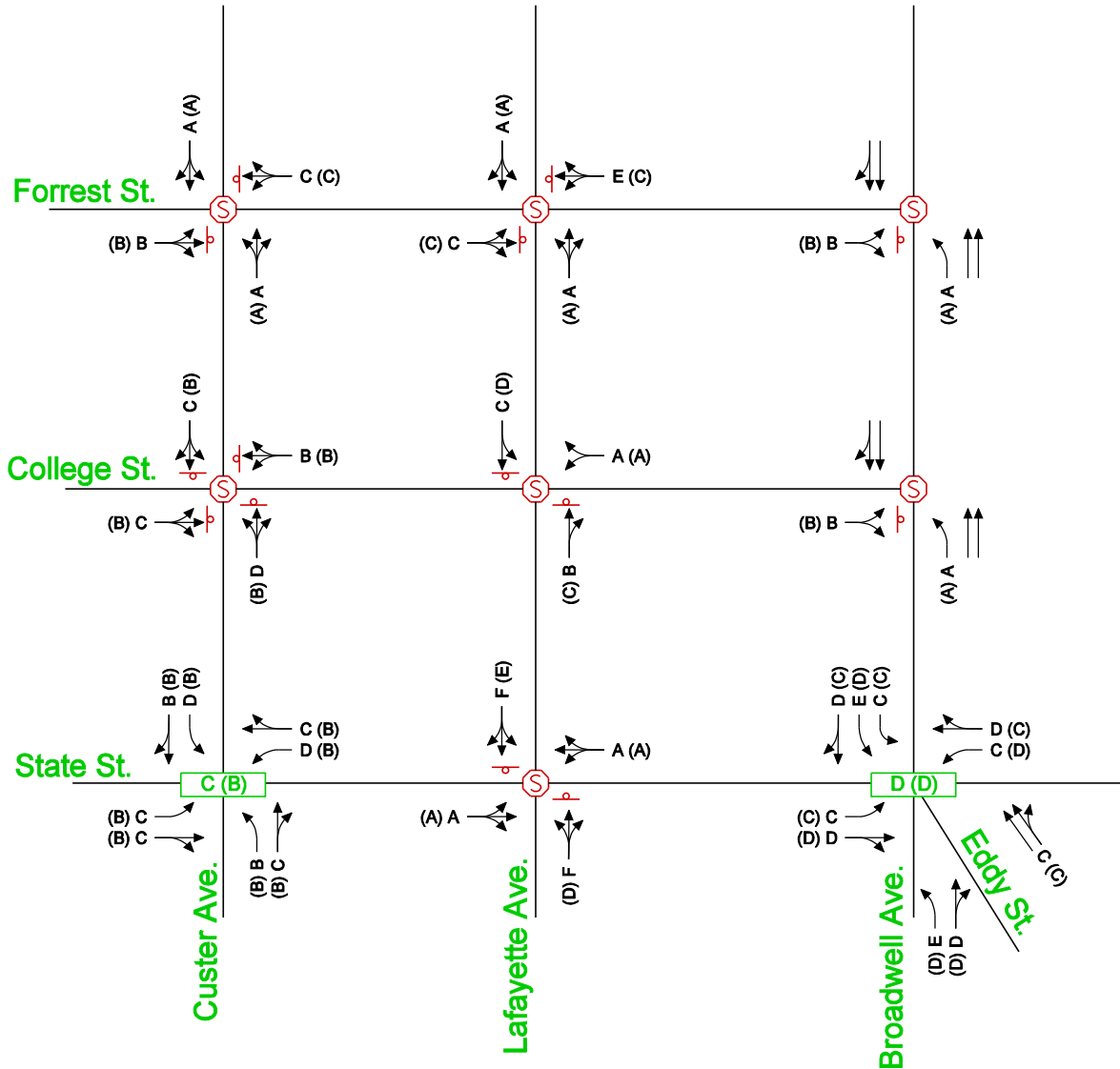
Pedestrian Volumes - AM (PM)



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LEGEND

-  - Movement LOS
-  - Stop Control Intersection
-  - Stop Sign
-  - Signalized Intersection LOS



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4.3 Closure Conditions Geometric Improvement Evaluation

Beyond the capacity analysis output, the need for improvements at study intersections was evaluated utilizing the Closure Conditions volumes and the same methodologies as Existing Conditions. Using NCHRP 457 methods, the need for left-turn and right-turn lanes on the major road or a two-lane approach on the minor road was evaluated at all study intersections. An eastbound left-turn lane is warranted at the intersection of State Street & Lafayette Avenue based upon this methodology.

Storage lengths for turning lanes were evaluated based on NDOR Roadway Design Manual Chapter 4 methodologies. Based on this evaluation and queue reports from the capacity analysis software, storage length increases are recommended for several turning lanes at the intersections of State Street & Custer Avenue. The recommended storage length for the new turn lane at State Street & Lafayette Avenue was also determined using the NDOR methodology. These recommendations are for storage lengths only and do not include any taper or deceleration lengths.

The following details each traffic improvement recommended for the study area under the Closure Conditions Scenario. These recommended improvements to the existing roadway network are illustrated in **Figure 8**.

College Street & Lafayette Avenue

Traffic operations improvements can be expected at this intersection with the closure of College Street west of Lafayette Avenue. However, upon closing College Street to through traffic, it is also recommended that this intersection be converted to an all-way stop intersection by adding a stop sign on the westbound approach. Similar to Existing Conditions, this recommendation is based upon guidelines provided in the MUTCD that allow for consideration of all-way stop control at intersections near large pedestrian generators where entering vehicle volumes are relatively balanced on all approaches.

State Street & Custer Avenue

Traffic currently operates at an acceptable level-of-service at this intersection during the peak hours. However, increases in turn lane storage lengths are proposed to provide sufficient storage and allow for thru vehicle spillback during the peak hours of operation.

- Extend the eastbound left-turn lane from 75' to **175'**
- Extend the westbound left-turn lane from 75' to **200'**
- Extend the southbound left-turn lane from 75' to **175'**
- Extend the northbound left-turn lane from 75' to **175'**

State Street & Lafayette Avenue

Although the addition of turn lanes on the minor approaches may reduce delay for specific movements, due to the magnitude of volume on State Street, finding gaps in traffic will be difficult during the peak hours. This delay is typical at minor street approaches to arterial roadways. However, per NCHRP methodology, new turn lanes are proposed to provide sufficient storage during the peak hours of operation.

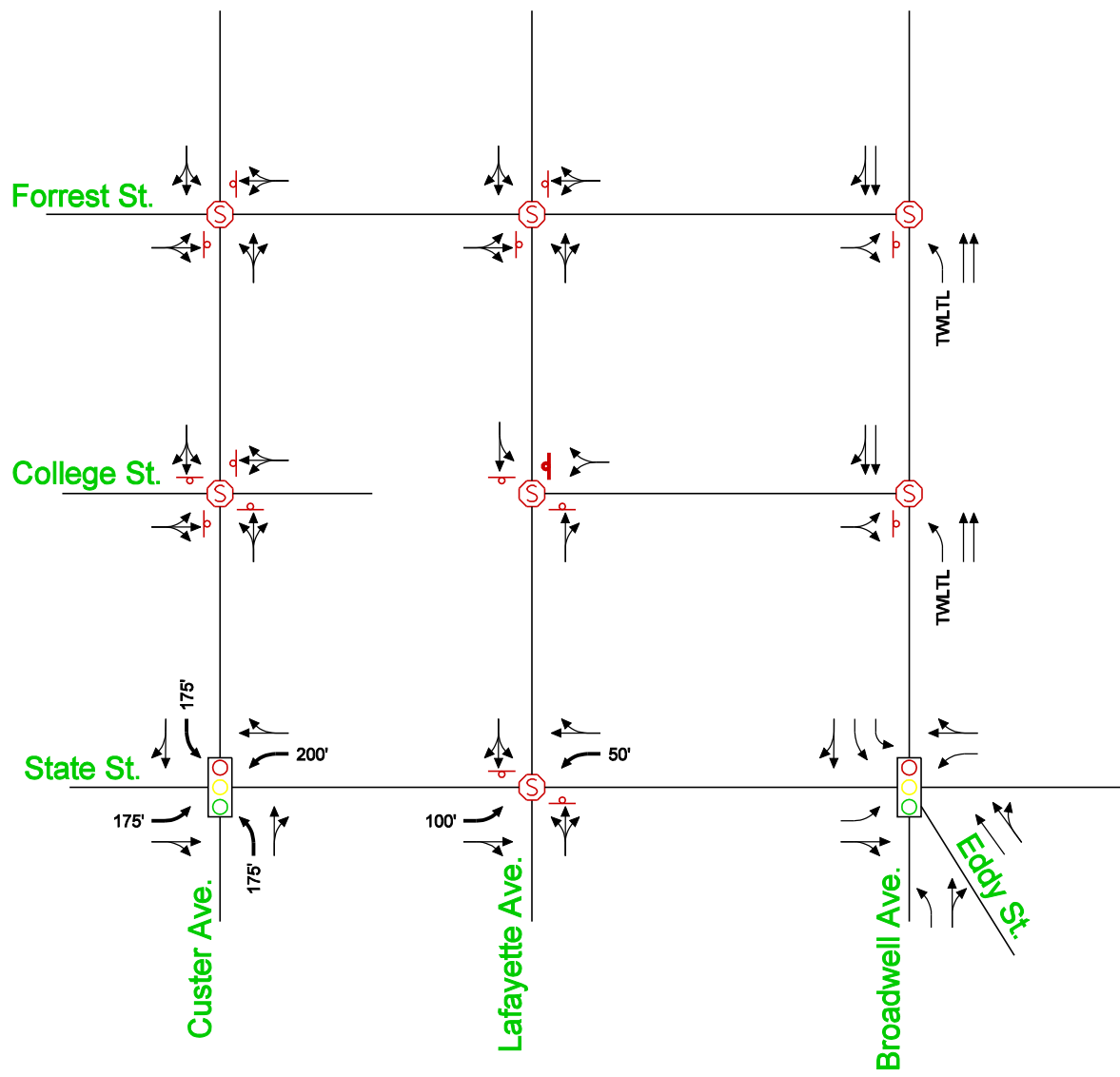
- Construct eastbound left-turn lane (**100'**)
- Construct westbound left-turn lane for geometric alignment (**50'**)

Five Points intersection

Traffic operations at this intersection are expected to improve due to the shift in driving patterns with the closure of College Street. Further in depth analysis of this intersection should be still be considered as traffic volumes continue to increase in the future. It is recommended to continue monitoring traffic operations at this intersection and make adjustments to signal timings as needed.

LEGEND

- Recommended Modification
- Signalized Intersection
- Stop Control Intersection
- Existing Stop Sign
- Recommended Stop Sign
- Two Way Left Turn Lane



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5.0 SCENARIO COMPARISON

Existing volumes were compared with Closure Conditions volumes to illustrate the volume increases or decreases on roadways within the study area roadway network. In addition to tracking the trends of peak hour turning movement volumes, ADT counts were also compared to identify trends and evaluate the impact the closure of College Street had on traffic volumes of neighborhood streets such as Sherman Boulevard, Howard Boulevard and Waugh Street.

5.1 Peak Hour Volume Trends

Figure 9 illustrates peak hour volume changes from Existing Conditions to Closure Conditions. Changes are visible for almost every turning movement within the study area. Although efforts were made to select two similar days for conducting counts, minor variations are expected between the two periods due to variables outside the control of this study such as environmental differences, school activity schedules, and student absences for illness. Therefore, changes in volume of plus or minus 10 vehicles between the two counts should be considered insignificant. The more noticeable driving pattern changes are discussed in greater detail below.

The most obvious trend to discern from the comparison is that the majority of traffic that currently uses College Street as a through corridor from Broadwell Avenue west shifted south to State Street rather than north to Capital Avenue or Forest Street. As a result, peak hour volumes increase significantly for several movements at the intersection of State Street & Custer Avenue under Closure Conditions

During Closure Conditions, as expected there is a decrease in vehicles turning onto College Street from Broadwell Avenue. A significant decrease in the northbound left-turning movement at Broadwell Avenue & College Street can be seen in the volume trend. Many of these vehicles use State Street as an alternate route, either making a northbound left-turn from Broadwell Avenue onto State Street or traveling westbound through the intersection. This volume trend results in a decrease in peak hour volumes for the northbound and southbound through movements on Broadwell Avenue and Eddy Street.

Traffic volumes on Lafayette Avenue increase between Forrest Street and State Street during Closure Conditions. Vehicles traveling westbound on College Street reach the road closure and turn onto Lafayette to reach Forrest Street or State Street. The volume of southbound right-turning vehicles at Lafayette Avenue & State Street increases by approximately 50 vehicles in both the AM and PM peak hours. The increase in volumes on State Street results in higher delay for the northbound and southbound approaches at the intersection of Lafayette Street & State Street.

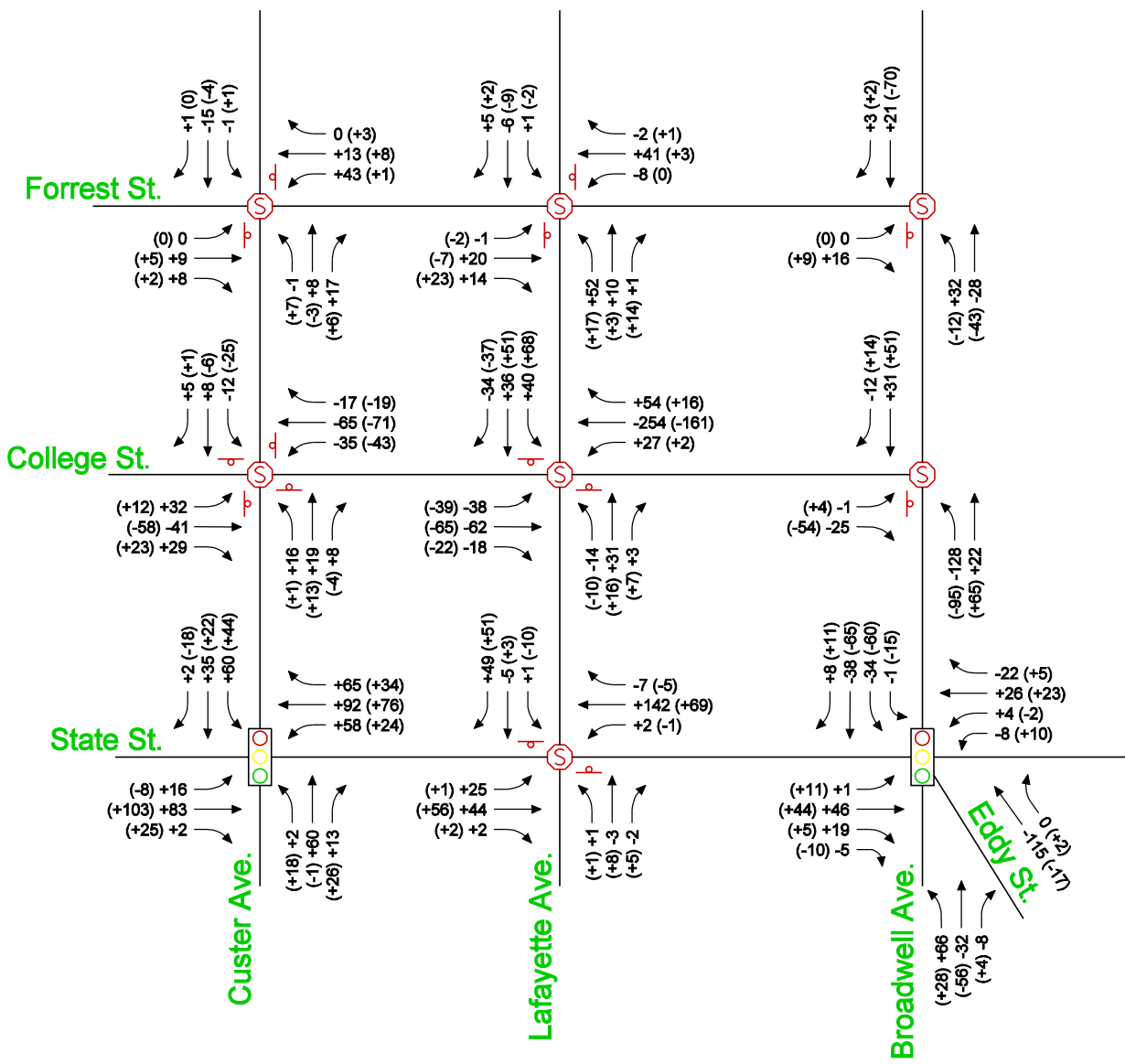
5.2 ADT Volume Trends

Figure 10 illustrates the ADT volume changes from Existing Conditions to Closure Conditions. As stated earlier, the location of the ADT counts was primarily selected in residential areas although some counters were placed on arterial roadways as well. Minor variations due to outside variables again are expected between the two count periods. Therefore, for the purposes of this report, only an ADT volume change of 10 percent or more is considered to be significant. All significant changes are discussed in greater detail below.

Similar to what was identified in the peak hour trend analysis, the ADT trends show an increase in daily traffic of 17 percent on State Street under Closure Conditions. Between Custer Avenue and Broadwell Avenue, the ADT on State Street increased from 7,697 vehicles per day (vpd) to 9,021 vpd. This increased volume on State Street results in higher delays for vehicles traveling on State Street, crossing State Street, or turning onto State Street. Additionally, with this increase, State Street is beginning to approach capacity for a two lane undivided roadway.

LEGEND

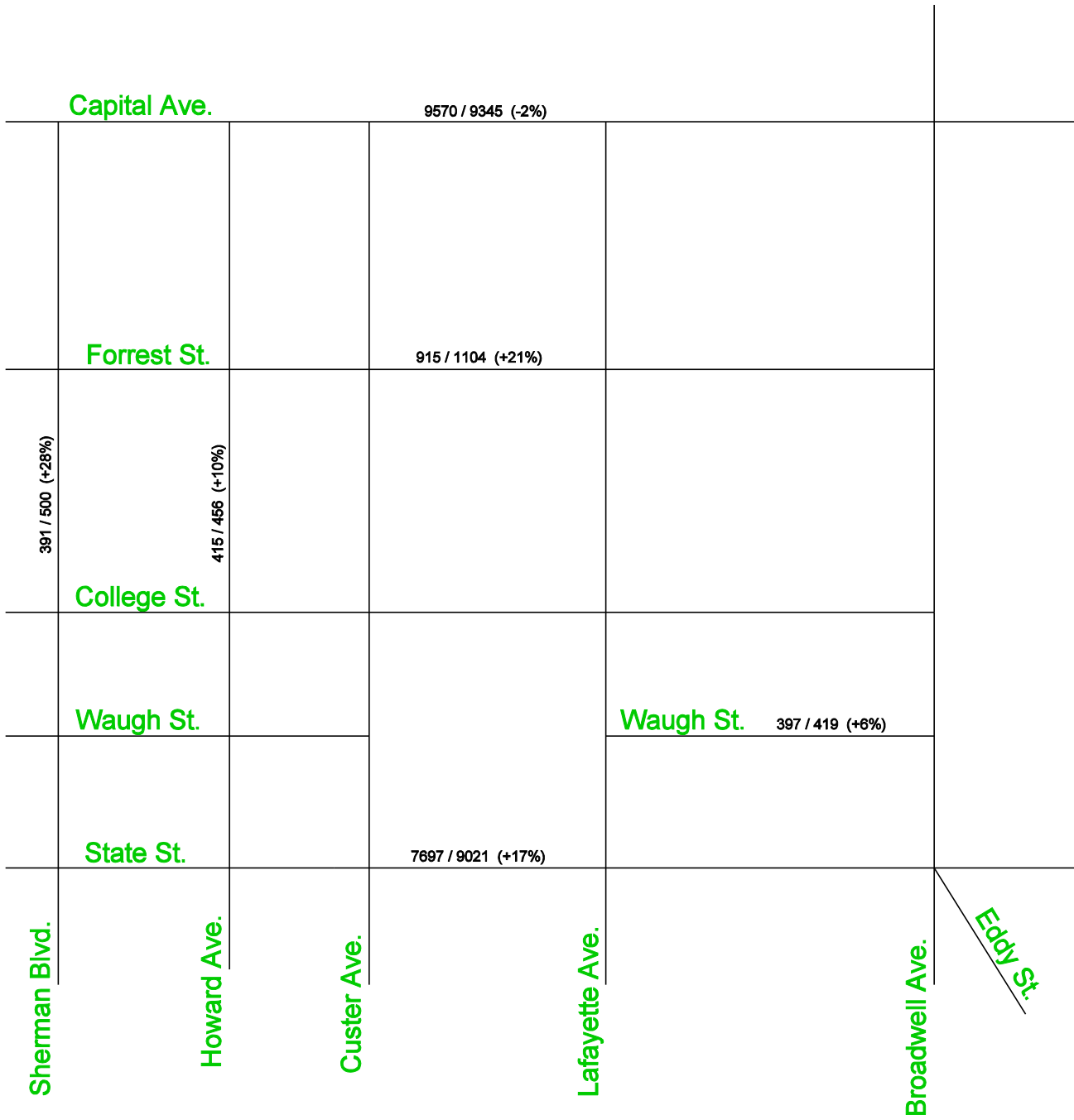
- AM (PM) - Peak Hour Volume Increase/Decrease
- Signalized Intersection
- Stop Control Intersection
- Stop Sign



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LEGEND

Pre-Closure ADT / Closure ADT (% ADT Change)



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A much more significant increase in traffic volumes on Forrest Street is evident when studying the ADT trend versus the peak hour volume trend. The ADT on Forrest Street increased 21 percent from 915 vpd to 1,104 vpd between Custer Avenue and Broadwell Avenue under Closure Conditions. Although this is a significant increase, the volume on Forrest Street does not approach the capacity of the roadway.

The impact that major street changes, such as a closure of College Street, have on residential street traffic is always a top priority for municipalities to take into consideration. The ADT on Howard Avenue from State Street to Capital Avenue increased by 41 vpd, or 10 percent. The ADT on Sherman Boulevard between State Street & Capital Avenue increased from 391 vpd to 500 vpd, or 28%. These increases are likely due to drivers using Sherman Boulevard and Howard Avenue to travel between State Street or Forrest Street in order to avoid the College Street closure.

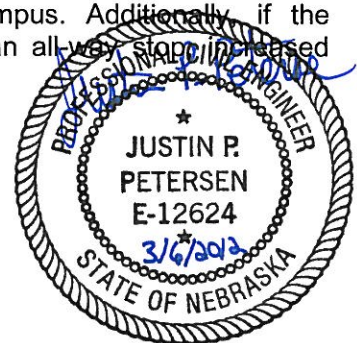
6.0 CONCLUSIONS

The purpose of this traffic study was to identify the traffic impacts associated with a closure of College Street from just east of the existing Grand Island Senior High faculty parking lot west access to Lafayette Avenue. By replicating this closure with traffic barricades and performing before and after traffic counts, a majority of the engineering assumptions in regards to driver reaction could be removed from the analysis. As anticipated, by studying the traffic volume trends between the Existing Conditions and Closure Conditions counts, the driving patterns in the area changed and roadways adjacent to College Street experienced increases in traffic.

In addition to recommending roadway improvements to mitigate the impacts of the adjusted traffic patterns under Closure Conditions, this study also evaluated the existing roadway network and recommended potential changes. The improvements recommended in this traffic study range from construction of new turn lanes, extensions of existing turn lanes, modifications to intersection traffic control for pedestrian safety and identification of intersections where more in-depth traffic analysis is required. These recommendations are discussed in detail under Sections 3.3 and 4.3 of this report.

A study of pedestrian safety along College Street between Custer Avenue and Lafayette Avenue was not included with this study. While this study focused mainly on the impact of a potential College Street closure to traffic operations, there are potential benefits to pedestrian safety as well. Currently, pedestrians must cross College Street to travel between the high school and the athletic facilities and parking lots south of College Street. Due to the routing of buses, the need for drop off areas and the need for access to the student and faculty parking lots vehicle traffic cannot be removed from College Street between Custer Avenue and the faculty parking lot entrance. However, the proposed closure of College Street will reduce the amount of through traffic within the Grand Island Senior High School campus and result in reduced pedestrian exposure to vehicle conflicts within the campus. Additionally, if the intersection of College Street & Lafayette Avenue is modified to an all-way stop, increased pedestrian safety at this intersection would be expected.

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June 13, 2017

Grand Island City Council
City Hall
100 East First Street
Box 1968
Grand Island NE 68802-1968

Re: Vacating College Street between Custer Avenue and Lafayette Avenue

Dear Members of the City Council:

We are writing on behalf of Grand Island Public Schools concerning its request that the City Council vacate the portion of College Street that separates the campus of Grand Island Senior High School. This request is being made in order to enhance the safety of our students, and to better utilize the land owned by the school district on both sides of College Street. Our reasons for making this request are stated below.

1. College Street divides the Grand Island Senior High campus and creates a safety hazard for students, staff and parents. Traffic on College Street impedes the operation of the school. As an example, Senior High School has eight periods of physical education classes which often use Memorial Stadium when weather permits. With eight physical education classes, students are crossing College Street sixteen times during the course of a school day. The mixture of traffic and students is an obvious safety hazard. Additionally, sports teams may cross College Street several times a day to access the track and sports fields on the other side.
2. Students park on Stadium Drive, which is located by Memorial Stadium, and cross College Street numerous times a day to reach their cars for various reasons such as going to lunch, going to work or going to attend Career Pathways Institute. At noon, it is common for School Resource Officers to park on College Street in order to protect students from traffic.
3. At least two to three times a month the staff at Grand Island Senior High School receive complaints from parents about the danger caused by mixing traffic on College Street with students who cross back and forth.

123 South Webb Road • P.O. Box 4904, Grand Island, NE 68802
308 385-5900 • Fax 308 385-5716 • tgrover@gips.org • www.gips.org

Every Student, Every Day, a Success

4. The greatest danger to the approximate 2,500 students at Senior High School is when they are dismissed at the end of the school day and many will enter College Street to get a ride, to walk home or to access their own vehicles. At dismissal, the concentration of students, car traffic and buses on College Street is heavy and dangerous.
5. Closing College Street will enhance the campus of Grand Island Senior High School and give it a sense of unity and cohesion. It will be easier and safer for students and staff to access the entire campus without constantly being concerned about mixing students with traffic.
6. Vacating College Street will allow Grand Island Public Schools to develop safe pedestrian walkways and parking limited to school purposes.
7. College Street has lost its character as a through-street which increases the danger of pedestrian accidents because drivers may not realize that the street no longer has the movement of traffic as its primary function.
8. Last, but equally important, vacating College Street will contribute to and enhance the planned renovations and expansion of Memorial Stadium using funds from the community and a generous donation to the Grand Island Public Schools Foundation of five million dollars from J. Landis Martin.

Thank you for your consideration of this matter.

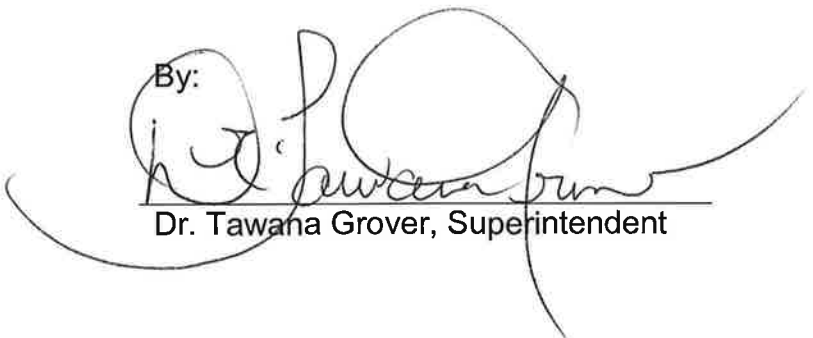
Sincerely,

GRAND ISLAND PUBLIC SCHOOLS

By:


Mrs. Bonnie Hinkle, President
Board of Education

By:


Dr. Tawana Grover, Superintendent

123 South Webb Road • P.O. Box 4904, Grand Island, NE 68802
308 385-5900 • Fax 308 385-5716 • www.gips.org

Every Student, Every Day, a Success

TO: John Collins
FROM: Cory Schmidt, Fire Chief
DATE: 06-19-17
RE: Closure of College Street

On behalf of the Grand Island Fire Department (GIFD), I'm writing to express my opinion in regards to the closure of College Street between Lafayette Avenue and Custer Avenue. The GIFD routinely utilizes College Street when responding to both emergency and nonemergency calls for service in the area of Grand Island Senior High. Should City Council vote to approve the closure of College Street, we will find an alternative response route with minimal change in our response times.

An area we would have concern with relates to responses to Senior High itself. Due to the size of the campus, the reporting party will need to specify which door the fire department should use for quickest access. Relocating vehicles and personnel from one side of Senior High to another may cause further delay without the use of College Street. This same clarification will also be needed for responses to outside areas such as the football field.

Overall, the proposed closure of College Street between Lafayette and Custer will have little impact on the operations of the GIFD.

From: Robert Falldorf [mailto:rfalldorf@gipolice.org]
Sent: Wednesday, June 21, 2017 2:49 PM
To: Catrina DeLosh
Cc: Virgil Harden; John Collins
Subject: RE: GIPS Request to Close College Street

We discussed the Grand Island Public School's request to close W. College between Lafayette and Custer at our Police Department command staff meeting (Police Chief and Captains) this afternoon. We were all of the opinion that the closing of this section of College Street wouldn't have any negative effects on our operations. Knowing that there may be some development or improvements of the sports complex area at the High School we all agreed that it only made sense to close this portion of College Street for the safety of students and patrons in the area. There are other arterial streets in this same area (newly improved Capital Avenue and State Street) that provide adequate east/west travel options.

Thanks,

Chief Falldorf

• THIS SPACE RESERVED FOR REGISTER OF DEEDS •

ORDINANCE NO. 9634

An ordinance to vacate existing right of way and to provide for filing this ordinance in the office of the Register of Deeds of Hall County; and to provide for publication and the effective date of this ordinance.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA:

SECTION 1. That a portion of an existing right-of-way within Scarff's Addition to West Lawn, City of Grand Island, Hall County, Nebraska more particularly described as follows:

COMMENCING AT THE SOUTHWEST CORNER OF LOT 4, SCARFF'S ADDITION TO WEST LAWN, SAID POINT ALSO BEING THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE AND THE NORTH RIGHT-OF-WAY LINE OF COLLEGE STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE EAST, ALONG THE SOUTH LINE OF BLOCK 4, BLOCK 3, AND BLOCK 2, SCARFF'S ADDITION TO WEST LAWN, TO A POINT BEING THE SOUTHEAST CORNER OF SAID BLOCK 2, SCARFF'S ADDITION TO WEST LAWN, SAID POINT ALSO BEING THE INTERSECTION OF THE WEST RIGHT-OF-WAY LINE OF LAFAYETTE AVENUE AND SAID NORTH RIGHT-OF-WAY LINE OF COLLEGE STREET; THENCE SOUTH, TO THE NORTHEAST CORNER OF BLOCK 7, SCARFF'S ADDITION TO WEST LAWN, SAID POINT ALSO BEING THE INTERSECTION OF SAID WEST RIGHT-OF-WAY LINE OF LAFAYETTE AVENUE AND THE SOUTH RIGHT-OF-WAY LINE OF SAID COLLEGE STREET; THENCE WEST, ALONG THE NORTH LINE OF BLOCK 7, BLOCK 6, AND BLOCK 5, SCARFF'S ADDITION TO WEST LAWN, TO THE NORTHWEST CORNER OF SAID BLOCK 5, SCARFF'S ADDITION TO WEST LAWN, POINT ALSO BEING A POINT OF INTERSECTION OF SAID EAST RIGHT-OF-WAY LINE OF CUSTER AVNEUE AND SAID SOUTH RIGHT-OF-WAY LINE OF SAID COLLEGE STREET; THENCE NORTH, ALONG SAID EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE TO THE POINT OF BEGINNING. SAID TRACT CONTAINS A CALCULATED AREA OF 86,087 SQUARE FEET OR 1.98 ACRES MORE OR LESS. SHOWN IN ATTACHED EXHIBIT "1".

Approved as to Form ☐ _____
June 23, 2017 ☐ City Attorney

ORDINANCE NO. 9634 (Cont.)

Be, and hereby is, vacated.

SECTION 2. The title to the property vacated by Section 1 of this Ordinance shall revert to the owner or owners of the real estate abutting the same in proportion to the respective ownership of such real estate.

SECTION 3. The City shall retain a utility easement through the vacated portion to line up with the existing easement through this area, a tract of land located in part of Scarff's Addition to West Lawn, City of Grand Island, Hall County, Nebraska, and more particularly described as follows:

THE SOUTH THIRTY (30) FEET OF COLLEGE STREET BETWEEN THE EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE AND THE WEST RIGHT-OF-WAY LINE OF LAFAYETTE AVENUE. SAID EASEMENT CONTAINS A CALCULATED AREA OF 32,280 SQUARE FEET OR 0.74 ACRES MORE OR LESS. SHOWN IN ATTACHED EXHIBIT "2".

SECTION 4. This ordinance is directed to be filed in the office of the Register of Deeds of Hall County, Nebraska.

SECTION 4. This ordinance shall be in force and take effect from and after its passage and publication, without the plate, within fifteen days in one issue of the Grand Island Independent as provided by law.

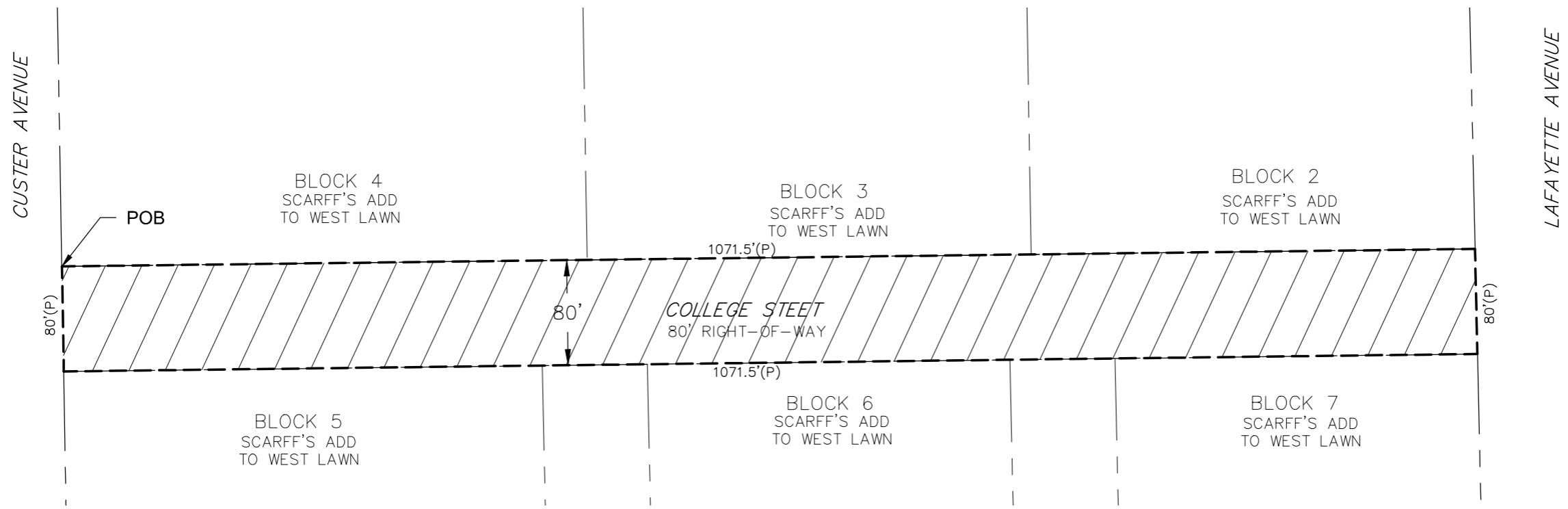
Enacted: June 27, 2017.

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

DWG: G:\Grand Island\Teams\Survey\Misc Project\2017\College st Vac\40-Design\Survey\SRVY\ref\XTP0_7.dwg USER: jimenez 0101279_xbase
 DATE: Jun 13, 2017 11:40am XREFS: 0130631_xbase 0120669_xbase combined 0122514_xbase topo-track 081395_xbase 0101279_xbase

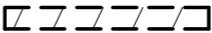





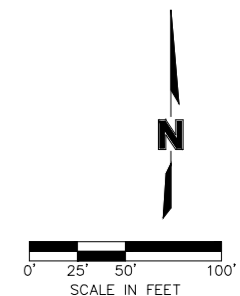
80' RIGHT-OF-WAY VACATION DESCRIPTION

A TRACT OF LAND LOCATED IN PART OF SCARFF'S ADDITION TO WEST LAWN, CITY OF GRAND ISLAND, HALL COUNTY, NEBRASKA, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF LOT 4, SCARFF'S ADDITION TO WEST LAWN, SAID POINT ALSO BEING THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE AND THE NORTH RIGHT-OF-WAY LINE OF COLLEGE STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE EAST, ALONG THE SOUTH LINE OF BLOCK 4, BLOCK 3, AND BLOCK 2, SCARFF'S ADDITION TO WEST LAWN, TO A POINT BEING THE SOUTHEAST CORNER OF SAID BLOCK 2, SCARFF'S ADDITION TO WEST LAWN, SAID POINT ALSO BEING THE INTERSECTION OF THE WEST RIGHT-OF-WAY LINE OF LAFAYETTE AVENUE AND SAID NORTH RIGHT-OF-WAY LINE OF COLLEGE STREET; THENCE SOUTH, TO THE NORTHEAST CORNER OF BLOCK 7, SCARFF'S ADDITION TO WEST LAWN, SAID POINT ALSO BEING THE INTERSECTION OF SAID WEST RIGHT-OF-WAY LINE OF LAFAYETTE AVENUE AND THE SOUTH RIGHT-OF-WAY LINE OF SAID COLLEGE STREET; THENCE WEST, ALONG THE NORTH LINE OF BLOCK 7, BLOCK 6, AND BLOCK 5, SCARFF'S ADDITION TO WEST LAWN, TO THE NORTHWEST CORNER OF SAID BLOCK 5, SCARFF'S ADDITION TO WEST LAWN, POINT ALSO BEING A POINT OF INTERSECTION OF SAID EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE AND SAID SOUTH RIGHT-OF-WAY LINE OF SAID COLLEGE STREET; THENCE NORTH, ALONG SAID EAST RIGHT-OF-WAY LINE OF CUSTER AVENUE TO THE POINT OF BEGINNING.

SAID TRACT CONTAINS A CALCULATED AREA OF 86,087 SQUARE FEET OR 1.98 ACRES MORE OR LESS.

- LEGEND**
-  R.O.W. VACATE AREA
 -  EXIST. PROPERTY LINE
 -  VACATED R.O.W. LINE
 -  P PLATTED DISTANCE



PROJECT NO:	2017-
DRAWN BY:	JMJ
DATE:	06-13-2017

80' RIGHT-OF-WAY VACATE

KULSSON ASSOCIATES

201 East 2nd Street
 P.O. Box 1072
 Grand Island, NE 68802-1072
 TEL 308.384.8750
 FAX 308.384.8752