

AGENDA ITEM 4A

**Public Hearing for a Conditional Use Permit
(CUP) for a Convenience Store with Limited
Fuel Sales – Lot 3 Brook Valley II Business
Park – QuikTrip Corporation**



**CITY OF LA VISTA
PLANNING DIVISION**

RECOMMENDATION REPORT

CASE NUMBER: PCUP-17-0006

FOR HEARING OF: December 14, 2017
REPORT PREPARED ON: December 7, 2017

I. GENERAL INFORMATION

- A. **APPLICANT:** QuikTrip Corporation
- B. **PROPERTY OWNER:** Gordo 79 LLC
- C. **LOCATION:** 11626 Virginia Plaza
- D. **LEGAL DESCRIPTION:** Lot 3 Brook Valley II Business Park
- E. **REQUESTED ACTION(S):** Conditional Use Permit to operate a convenience store with limited fuel sales.
- F. **EXISTING ZONING AND LAND USE:**
C-3 Highway Commercial/Office Park District, Gateway Corridor Overlay (Overlay District); the property is vacant.
- G. **PROPOSED USES:** The Conditional Use Permit (CUP) will allow the applicant to operate a convenience store with limited fuel sales.
- H. **SIZE OF SITE:** 2.39 acres

II. BACKGROUND INFORMATION

- A. **EXISTING CONDITION OF SITE:** The property is vacant. The topography of the property is relatively flat with a gradual downward slope to the north.
- B. **GENERAL NEIGHBORHOOD/AREA LAND USES AND ZONING:**
 1. **North:** Tax Lot 3 17-14-12; Vacant; TA Transitional Agriculture District with a Gateway Corridor District (Overlay District)
 2. **East:** Lot 2 Brook Valley Business Park II; Vacant; C-3 Highway Commercial/Office Park District, Gateway Corridor Overlay (Overlay District)
 3. **South:** Lot 1 Brook Valley Business Park II, Replat Three; Commercial Strip Shopping Center; C-3 Highway Commercial/Office Park District, Gateway Corridor Overlay (Overlay District)

4. **West:** Lot 1 Brook Valley Business Park II, Replat One; Vacant; C-3 Highway Commercial/Office Park District, Gateway Corridor Overlay (Overlay District)

C. RELEVANT CASE HISTORY:

N/A

D. APPLICABLE REGULATIONS:

1. Section 5.12 of the Zoning Regulations – C-3 Highway Commercial/Office Park District
2. Section 5.17 of the Zoning Regulations – Gateway Corridor District (Overlay District)
3. Article 6 of the Zoning Regulations – Conditional Use Permits

III. ANALYSIS

A. COMPREHENSIVE PLAN:

1. The Future Land Use Map of the Comprehensive Plan currently designates this property for commercial uses.

B. OTHER PLANS: N/A

C. TRAFFIC AND ACCESS:

1. Access will be from a right-in/right-out along 117th Street and two full access points onto Virginia Plaza.
2. The cross-section of 117th Street would be improved to a three-lane section with a median to Virginia Plaza. Additional right-of-way will be required due to the additional width of the improvements.
3. As per the revised traffic study, the commencement of operations of this use will cause an MUTCD Traffic Signal Warrant 2 to be met for the 117th Street and Giles Road intersection, making the installation of a traffic signal at this location warranted as part of the site improvements.
4. Upon installation, the traffic signal will need to be coordinated with the rest of signal system along Giles Road.
5. A copy of the Final Traffic Memo, minus the exhibits, has been attached to the CUP as an exhibit.

D. UTILITIES: All utilities are available to the site.

E. PARKING REQUIREMENTS: The parking requirements would follow the minimum needed for this use within Section 7.06 of the zoning ordinance. Based on the size of the facility, 28 parking spaces would be required. The site plan depicts 50 parking stalls, not including spaces adjacent to fuel pumps that are allowed within the overall count as per the ordinance.

F. LANDSCAPING: The landscaping plan has been reviewed as per the Gateway Corridor design guidelines. Comments regarding the landscaping plan are stated within the design review letter from the City's Design Review Architect attached to this report. The documents provided to the Planning Commission have been revised since the last review letter to address these comments. Final design review approval of the landscaping plan will be required prior to City Council review.

G. BUILDING DESIGN: The building design has been reviewed as part of the design review process that is required for developments within the Gateway Corridor District (Overlay District). The overall design review process is substantially complete and will be required to be fully completed prior to issuance of a building permit.

IV. REVIEW COMMENTS:

1. The conditional use permit specifically requires the proposed use to be limited to the operations described within the Operational Statement (Exhibit B).
2. An agreement outlining requirements and financial commitments regarding roadway improvements to 117th Street and signalization improvements to the intersection of 117th Street and Giles Road will need to be in final form prior to City Council review.
3. The improvement of 117th Street to a three-lane section will require the dedication of additional right-of-way on both sides of 117th Street. Requirements for this dedication shall be detailed within an agreement with the City.
4. A post-construction storm water management plan will be required at the time of building permit application.

V. STAFF RECOMMENDATION – CONDITIONAL USE PERMIT:

Staff recommends approval of the Conditional Use Permit, contingent on the finalization of the design review process, as well as the resolution comments #2 and #3 in Review Comments above, as the CUP request is consistent with the Comprehensive Plan and the Zoning Ordinance.

VI. ATTACHMENTS TO REPORT:

1. Vicinity Map
2. Applicant's Operational Statement
3. Staff Review Letter
4. Design Review Letter
5. Draft CUP

VII. COPIES OF REPORT TO:

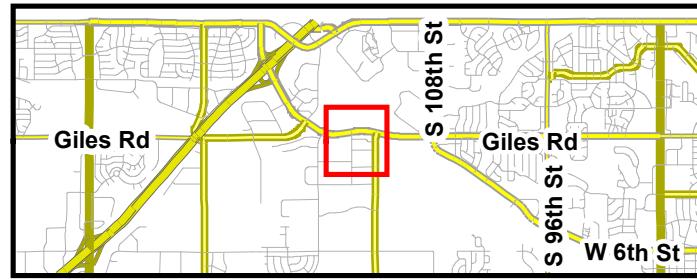
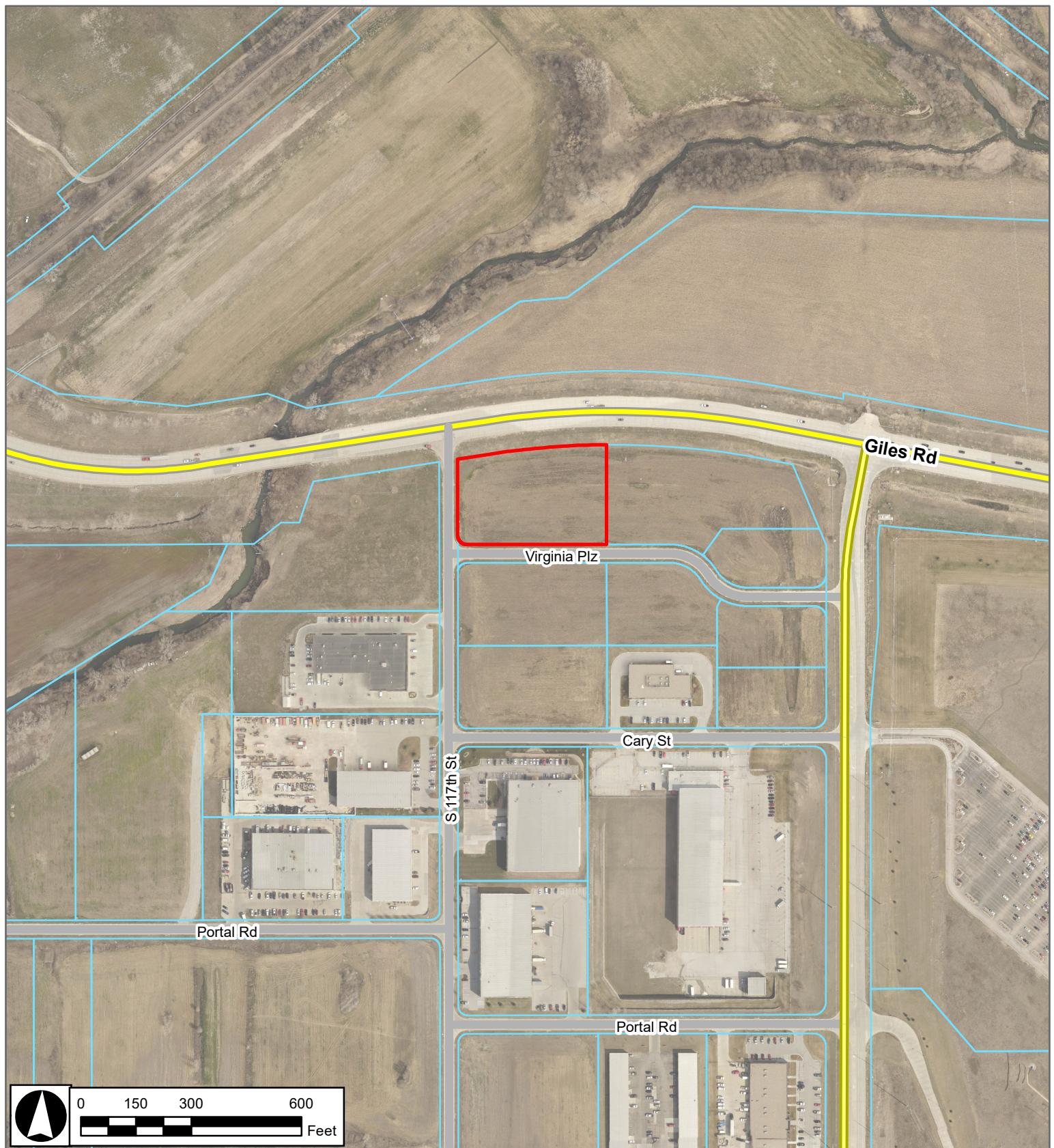
1. Erik Eckhart, QuikTrip Corporation, Applicant
2. Jeff Wilmes, Gordo 79 LLC, Property Owner
3. Joe Flaxbeard, Lamp Rynearson
4. Public Upon Request

Prepared by:

Community Development Director

12-8-17

Date



Lot 3 Brook Valley II Business Park

12-5-2017

JMC



Executive Summary

The QuikTrip Corporation will open a new Gas Station and Convenience Store located on the corner of S 117th street and Giles Road, La Vista, Nebraska.

The QuikTrip Corporation Store #0577 hours of operation will be 24 hours per day, 365 days per year.

The QuikTrip Corporation Store #0577 will serve La Vista and the surrounding communities with competitive gas prices and quality convenience products at an affordable price.

The QuikTrip Corporation Store #0577 will capture an increasing share of the local and commuter traffic passing through Giles Road.

The QuikTrip Corporation Store #0577 is a venture maintained by a group of successful business individuals led by Chester E. Cadieux.

The Market

The targeted market segment is made up of consumers who desire a quality convenience store stocked with quality products for an affordable price. Our target audiences are automobile owners and drivers, students, travelers, visitors, tourists, et al.

Our Product

The QuikTrip Corporation Store #0577 is a fully registered and licensed standard gas station, positioned in the gas station industry in the United States of America to maximize profits. Aside from the point that we will be retailing gasoline, we will also engage in other complimentary services that will help us maximize profits.

The following are products and services that will be made available to our customers:

- Gas
- Retailing of Groceries and Soft Drinks et al

August 25, 2017



Eric Eckhart
QuikTrip Corporation
5725 Foxridge Drive
Mission, KS 66202

RE: Conditional Use Permit – Initial Review
Proposed QuikTrip – 117th and Giles
Lot 3, Brook Valley II Business Park

Mr. Eckhart:

Thank you for your submittal of the QuikTrip Convenience Store with Limited Fuel Sales Conditional Use Permit (CUP) application. Staff has reviewed the initial submittal and has provided the following initial comments:

1. In regards to Articles 6.05.01, 6.05.05 and 6.05.10, concerning traffic congestion, the applicant needs to have a traffic impact study performed by a qualified traffic engineer. The study will need to include the intersections of 114th and Giles, 117th and Giles, and 117th and Virginia for existing condition traffic volumes and for buildout year of the proposed facility. This should include a review of the MUTCD traffic signal warrants at the 117th and Giles intersection. If a new driveway access is to be made onto 117th Street as shown then it will be necessary for the applicant to include a raised median on 117th Street to restrict access to right-in/right-out movements. Widening of 117th Street may also be required, particularly if signalization of 117th and Giles is found to be warranted. Installation of the traffic signal and any street widening would be the responsibility of the applicant to provide. The applicant's traffic engineer may contact Felsburg, Holt & Ullevig to obtain existing signal timings along Giles Road if needed for the study. Contact information can be provided.
2. In regards to Articles 6.05.04 and 6.05.11 concerning adequate facilities to serve the proposed use, staff recommends that Virginia Plaza be converted back to a public street. It was originally constructed as a public street and then it was vacated to allow for the development proposal called "Shoppes on Giles" that was going to include on-street parking stalls and other amenities that would not be allowed in a public street. It now appears that such a development concept is not going to proceed. This project is shown to occur on the originally platted Lot 3 and does not include any of the vacated Virginia Plaza. This would require a right-of-way dedication process by the current property owner of Virginia Plaza. The site plans submitted with the application indicate that storm water management has been considered. Detailed review will be conducted during a building permit review to verify no increase in 2-

City Hall
8116 Park View Blvd.
La Vista, NE 68128-2198
p: 402-331-4343
f: 402-331-4375

Community Development
8116 Park View Blvd.
p: 402-331-4343
f: 402-331-4375

Fire
8110 Park View Blvd.
p: 402-331-4748
f: 402-331-0410

Golf Course
8305 Park View Blvd.
p: 402-339-9147

Library
9110 Giles Rd.
p: 402-537-3900
f: 402-537-3902

Police
7701 South 96th St.
p: 402-331-1582
f: 402-331-7210

Public Buildings & Grounds
8112 Park View Blvd.
p: 402-331-4343
f: 402-331-4375

Public Works
9900 Portal Rd.
p: 402-331-8927
f: 402-331-1051

Recreation
8116 Park View Blvd.
p: 402-331-3455
f: 402-331-0299

year peak flows between pre-development and post-development and treatment of the first half-inch of storm water runoff. The path of tanker trucks on the site to serve the fuel tanks should be illustrated on the site plans.

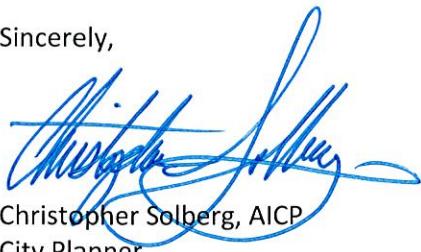
3. Each plan set provided depicts a monument sign location with the dimensions of the proposed sign. The dimensions should be removed from the plan set. Sign size and design of all proposed signage will be handled at the time of sign permit review.
4. Sheet 1 (Site/Demo Plan) depicts a 5' sidewalk along the south and west sides of the property. The sidewalk on the west side of the property needs to extend to the north property line.
5. Sheet L100 (Landscaping Plan) depicts an Austrian Pine at the G1 coordinate in a line of pines along the eastern property line. This should be removed to allow for a possible future internal connection to Lot 2 Brook Valley II Business Park. Additionally, the subject line of pine trees is depicted on Lot 2 Brook Valley II Business Park, rather than on the subject property. This needs to be corrected. Additional comments regarding the Landscaping Plan will be provided through the Gateway Corridor Design Review process.
6. The design review application submittal for the project has been forwarded to the City's Design Review Architect. Due to a backlog of projects, expect a delay in the provision of a review letter regarding compliance with the Gateway Corridor Design Guidelines. A review letter will be forwarded upon receipt and review by the Planning Department. As noted in the pre-application meeting, the project cannot proceed to the Planning Commission until the design review process is substantially complete.

A draft Conditional Use Permit (CUP) will be forwarded to you in the coming days for your review. It should be noted that this is just a draft of the CUP document, the City Attorney will review the draft prior to forwarding it on to City Council.

Please submit 4 full size copies (along with electronic copies) of the revised documents. A timeline for review by Planning Commission and City Council will be determined after review of the revised documents and the results of the initial design review.

Should you have any questions please contact me at 402-593-6402 or csolberg@cityoflavista.org.

Sincerely,

A handwritten signature in blue ink, appearing to read "Christopher Solberg".

Christopher Solberg, AICP
City Planner

Cc: Ann Birch, Community Development Director
John Kottmann, City Engineer
Jeff Sinnett, Chief Building Official
Jeff Wilmes, Gordo 79 LLC
Joe Flaxbeard, Lamp Rynearson
File

November 17, 2017

Mr. Chris Solberg
City of La Vista
8116 Park View Blvd
La Vista, NE 68128

RE: QuikTrip - Design Review #1

Dear Chris:

This letter shall provide recommendations and/or corrections for the applicant's design review and submittal package dated September 27, 2017. For tracking purposes I have noted deficiencies in the submittal package, and where appropriate, the corresponding requirements outlined in the Gateway Corridor Design Guidelines.

General:

1. The palette of primary exterior material samples submitted is generally acceptable and in the earth tone range as required by the Guidelines. A list of required clarifications for full approval is as follows
 - a. No membrane roofing or glass information was submitted. All major exterior materials must be submitted for review by either physical samples or detailed color cut sheets. Roof membranes are required to be in the lighter color range, such as white.
 - b. A sample of Daltile, Invoke – Evening Veil was submitted and labeled for use at building columns. The color exterior elevations do not note this material anywhere, but do note a dark gray color EIFS. Are they essentially representing the same application? Please clarify. Either way, this material color appears to have a cool gray hue and should be re-selected to have a warmer, more earth tone hue. One possibility may be to utilize the darker accent brick, Interstate – Midnight Black, at all these areas instead of introducing a third material.
 - c. The drawings indicate a retaining wall on the north side of the site, but there was no segmental retaining wall block sample or literature included. A sample will be required for approval and demonstrating a close match in color, texture, and scale similar to the character of the building.
 - d. Any exterior field paint is required to be a high durability coating system similar to Tnemec, or equal.
2. No lighting fixture cut sheets were submitted for parking lot poles or building mounted lighting. The Guidelines do not allow flexibility in the types of exterior lights that can be provided. Consistency throughout the Gateway Corridor District is the established precedent. Refer again to Appendix B for mandated fixtures.

Drawings:

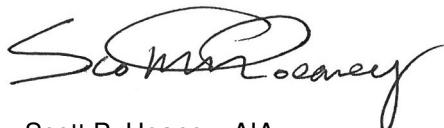
1. Site/Demo Plan 1:
 - a. The refuse enclosure indicated on the west side of the site must be constructed of materials matching the building. A sample of a black poly mesh material was included on the sample board and labeled as Trash Enclosure/Mechanical Screen. I don't know how this material is meant to be incorporated, but it would not be considered a permanent, high quality material. Review again the Equipment Screening requirements outlined in Section IV.H.
 - b. All site signage shall be reviewed separately by Planning Department staff and meet the City of La Vista signage regulations.
2. Preliminary Grading Plan 4 & Landscape Plan L100:
 - a. The preliminary contours indicate a good variety of natural, undulating site forms, but plantings should avoid being arranged in consistent straight lines. Planting arrangements need to be reconsidered. Refer again to Section III.F.
 - b. All site utility service equipment, meters, etc. (e.g. transformer) need to be screened all year round by plantings.
 - c. The Plant Schedule proposes several species that are non-compliant. Review again Section III.D. for the minimum number of species required and review the approved Plant Materials list in Appendix A of the Guidelines.
 - i. Deciduous Trees –
 1. Swamp White Oak is on the approved plant list.
 - d. The two above ground detention areas need to be planted with species that are suited to bioretention conditions. No plantings are shown at this time. Refer again to Section III.K.5. referencing Nebraska Bioretention and Rain Garden Plants Guide, 2010 edition.
3. Color Exterior E elevations:
 - a. The Guidelines require four-sided architecture with same caliber of finishes and design attention on all facades. Large areas of blank exterior areas to be avoided. The entire north (rear) elevation would be considered "blank" and has very little architectural variety, and needs to be reconsidered to be more similar to the other three elevations. Refer again to Section IV.C.
 - b. Exterior ladders are not allowed.
 - c. All roof top mechanical units appear to be adequately screened by either a raised building parapet or a screen enclosure, but the screening infill material cannot be poly mesh.

Please feel free to contact me regarding additional clarifications or questions.

(402) 431-6317 direct
sheaney@schemmer.com

Sincerely,

THE SCHEMMER ASSOCIATES, INC.



Scott P. Heaney, AIA
Senior Architect
Commercial Market Leader

City of La Vista Conditional Use Permit

Conditional Use Permit for Convenience Store with Limited Fuel Sales

This Conditional Use Permit issued this th day of January, 2018, by the City of La Vista, a municipal corporation in the County of Sarpy County, Nebraska (“City”) to, QuikTrip Corporation (“Owner”), pursuant to the La Vista Zoning Ordinance.

WHEREAS, Owner wishes to construct and operate a convenience store with limited motor fuel sales (and motor fuel storage and dispensing related to said sales) upon the following described tract of land within the City of La Vista zoning jurisdiction:

Lot 3, Brook Valley II Business Park, La Vista, Nebraska.

WHEREAS, Owner has applied for a conditional use permit for the purpose of constructing and operating a convenience store with limited motor fuel sales (and motor fuel storage and dispensing related to said sales); and

WHEREAS, the Mayor and City Council of the City of La Vista are agreeable to the issuance of an amendment to the conditional use permit to Owner for such purposes, subject to certain conditions and agreements as hereinafter provided.

NOW, THEREFORE, BE IT KNOWN THAT subject to the conditions hereof, this conditional use permit is issued to the Owner to use the area designated on Exhibit “A” hereto for a convenience store with limited motor fuel sales (and motor fuel storage and dispensing related to said sales), said uses hereinafter being referred to as “Permitted Use or Use”.

Conditions of Permit

The conditions to which the granting of this permit is subject are:

1. The rights granted by this permit are transferable and any variation or breach of any terms hereof shall cause permit to expire and terminate without the prior written consent of the City (amendment to permit) or unless exempted herein.
2. In respect to the proposed use:
 - a. The premises shall be developed and maintained in accordance with the CUP Plan Set (“Exhibit C”) as presented to the City Council on _____ and incorporated herein by this reference. Any modifications must be submitted to the City Planner for approval.
 - b. Hours of operation for convenience store will be 24 hours a day, seven days a week.
 - c. There shall be no storage, placement or display of goods, supplies or any other material, substance, container or receptacle outside of the convenience store, except as approved in writing by the City.
 - d. Due to anticipated traffic impacts detailed within the Final Traffic Memo (Exhibit D), roadway improvements to 117th Street and signalization improvements to the intersection of 117th Street and Giles Road will be required to be completed prior to the issuance of a Certificate of Occupancy. A development agreement outlining requirements and financial

- i. All signs shall comply with the City's sign regulations and meet the requirements of the Gateway Corridor Design Guidelines.
4. The applicant's right to maintain the use as approved pursuant to these provisions shall be based on the following:
 - a. An annual inspection to determine compliance with the conditions of approval. The conditional use permit may be revoked upon a finding by the City that there is a violation of the terms of approval.
 - b. The use authorized by the conditional use permit must be initiated within one (1) year of approval and shall become void two (2) years after the date of approval unless the applicant has fully complied with the terms of approval.
 - c. All obsolete or unused structures and accessory facilities and any remaining environmental or safety hazard shall be abated and/or removed at owner's expense within twelve (12) months of cessation of the special use.
5. Notwithstanding any other provision herein to the contrary, this Permit, and all rights granted hereby, shall expire and terminate as to a permitted use hereunder upon the first of the following to occur:
 - a. Owner's abandonment of the Permitted Use. Non-use thereof for a period of twelve (12) months shall constitute a presumption of abandonment.
 - b. Cancellation, revocation, denial or failure to maintain any federal, state or local permit required for the Conditional Use.
 - c. Owner's construction or placement of a storage tank, structure or other improvement on the premises not specified in this permit.
 - d. Owner's breach of any other terms hereof and his failure to correct such breach within ten (10) days of City's giving notice thereof.
6. If the Permitted Use is not commenced within one (1) year from January __, 2018, this Permit shall be null and void and all rights hereunder shall lapse, without prejudice to Owner's right to file for an extension of time pursuant to Section 11-710 of the La Vista Municipal Code.
7. In the event of the owner's failure to promptly remove any safety or environmental hazard from the premises, or the expiration or termination of this permit and the owner's failure to promptly remove the permitted structures or any remaining environmental or safety hazard, the City may, at its option (but without any obligation to the owner or any third party to exercise said option) cause the same to be removed at owner's cost (including, but not limited to, the cost of any excavation and earthwork that is necessary or advisable) and the Owner shall reimburse the city the costs incurred to remove the same. Owner hereby irrevocably grants the City, its agents and employees the right to enter the premises and to take whatever action as is necessary or appropriate to remove the structures or any environmental or safety hazards in accordance with the terms of this permit, and the right of the City to enter the premises as necessary or appropriate to carry out any other provision of this permit.
8. If any provision, or any portion thereof, contained in this agreement is held to be unconstitutional, invalid, or unenforceable, the remaining provisions hereof, or portions thereof, shall be deemed severable, shall not be affected, and shall remain in full force and effect.

Miscellaneous

The conditions and terms of this Permit shall be binding upon Owner, his successors and assigns.

1. Delay of City to terminate this Permit on account of breach of Owner of any of the terms hereof shall not constitute a waiver of City's right to terminate, unless it shall have expressly waived said breach and a waiver of the right to terminate upon any breach shall not constitute a waiver of the right to terminate upon a subsequent breach of the terms hereof, whether said breach be of the same or different nature.
2. Nothing herein shall be construed to be a waiver or suspension of, or an agreement on the part of the City to waive or suspend, any zoning law or regulation applicable to the premises except to the extent and for the duration specifically authorized by this permit.
3. Any notice to be given by City hereunder shall be in writing and shall be sufficiently given if sent by regular mail, postage prepaid, addressed to the Owner as follows:

Contact Name and Address: Erik Eckhart
QuikTrip Corporation
5725 Foxridge Drive
Mission, KS 66202

Effective Date:

This Permit shall take effect upon the filing hereof with the City Clerk a signed original hereof.

THE CITY OF LA VISTA

By _____
Douglas Kindig, Mayor

Attest:

Pam Buethe, CMC
City Clerk
CONSENT AND AGREEMENT

The undersigned does hereby consent and agree to the conditions of this permit and that the terms hereof constitute an agreement on the part of the undersigned to fully and timely perform each and every condition and term hereof, and the undersigned does hereby warrant, covenant and agree to fully and timely perform and discharge all obligations and liabilities herein required by Owner to be performed or discharged.

Owner:

By: _____

Title: _____

Date: _____

ACKNOWLEDGMENT OF NOTARY

STATE OF NEBRASKA)
) ss.
COUNTY OF _____)

On this _____ day of _____, 2018, before me, a Notary Public duly commissioned and qualified in and for said County and State, appeared Douglas Kindig and Pamela A. Buethe, personally known by me to be the Mayor and City Clerk of the City of La Vista, and the identical persons whose names are affixed to the foregoing Agreement, and acknowledged the execution thereof to be their voluntary act and deed and the voluntary act and deed of said City.

Notary Public

ACKNOWLEDGMENT OF NOTARY

STATE OF KANSAS)
) ss.
COUNTY OF _____)

On this _____ day of _____, 2018, before me, a Notary Public duly commissioned and qualified in and for said County and State, appeared [_____], personally known by me to be the _____ of QuikTrip Corporation, and the identical person whose name is affixed to the foregoing Agreement, and acknowledged the execution thereof to be his voluntary act and deed and the voluntary act and deed of said company.

Notary Public

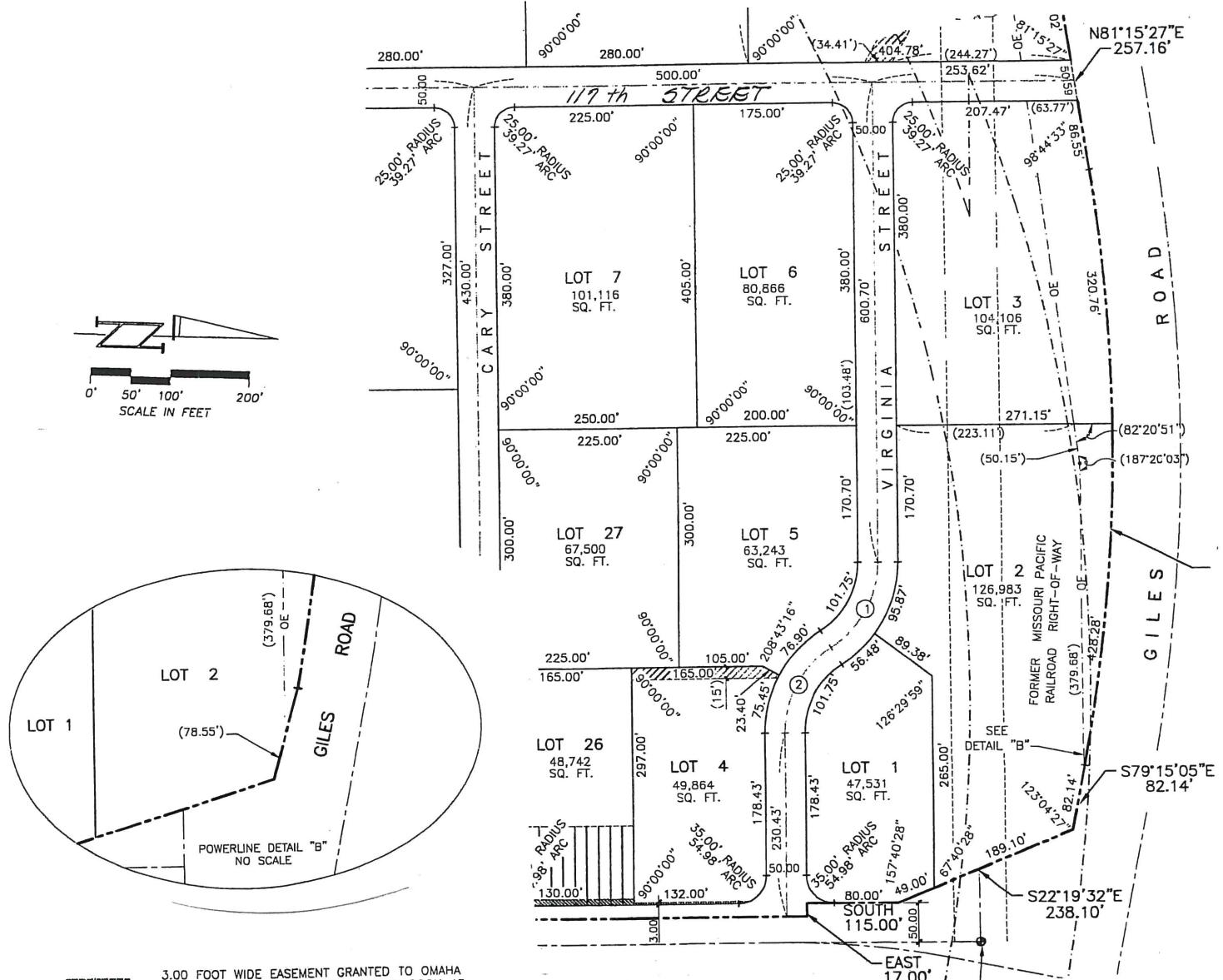
Exhibit A
Surveyor's Certificate

LAND SURVEYOR'S CERTIFICATE

I hereby certify that this survey was made by me or under my direct personal supervision and that I am a duly Registered Land Surveyor under the laws of the State of Nebraska.

LEGAL DESCRIPTION

Lot 3, Brook Valley II Business Park, a subdivision as surveyed, platted, and recorded in Sarpy County, Nebraska.



3.00 FOOT WIDE EASEMENT GRANTED TO OMAHA
PUBLIC POWER DISTRICT RECORDED IN BOOK 47
AT PAGE 104 OF THE SARPY COUNTY RECORDS

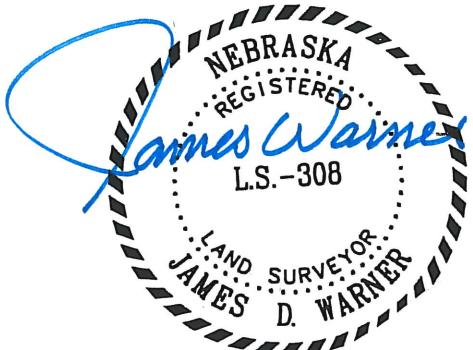


STORM SEWER AND DRAINAGE EASEMENT
(SEE RECORDED INSTRUMENT)

CENTERLINE		CURVE		INFORMATION
CURVE NO.	DELTA	TANGENT	LENGTH	RADIUS
1 AND 2	58'00"00"	69.57'	127.05'	125.51'

ADDRESS: _____ BUILDING PERMIT NO. _____

Date: January 25, 1998 Reg. No. 308



LEGEND

- corners found
- corners set
- recorded distance
- △ measured distance
- ◆ computed distance or angle
- crimped top pipe
- open top pipe
- △ set temporary point

TD² FILE NO. 850-117

BOOK _____ PAGE _____

Exhibit B
Operational Statement

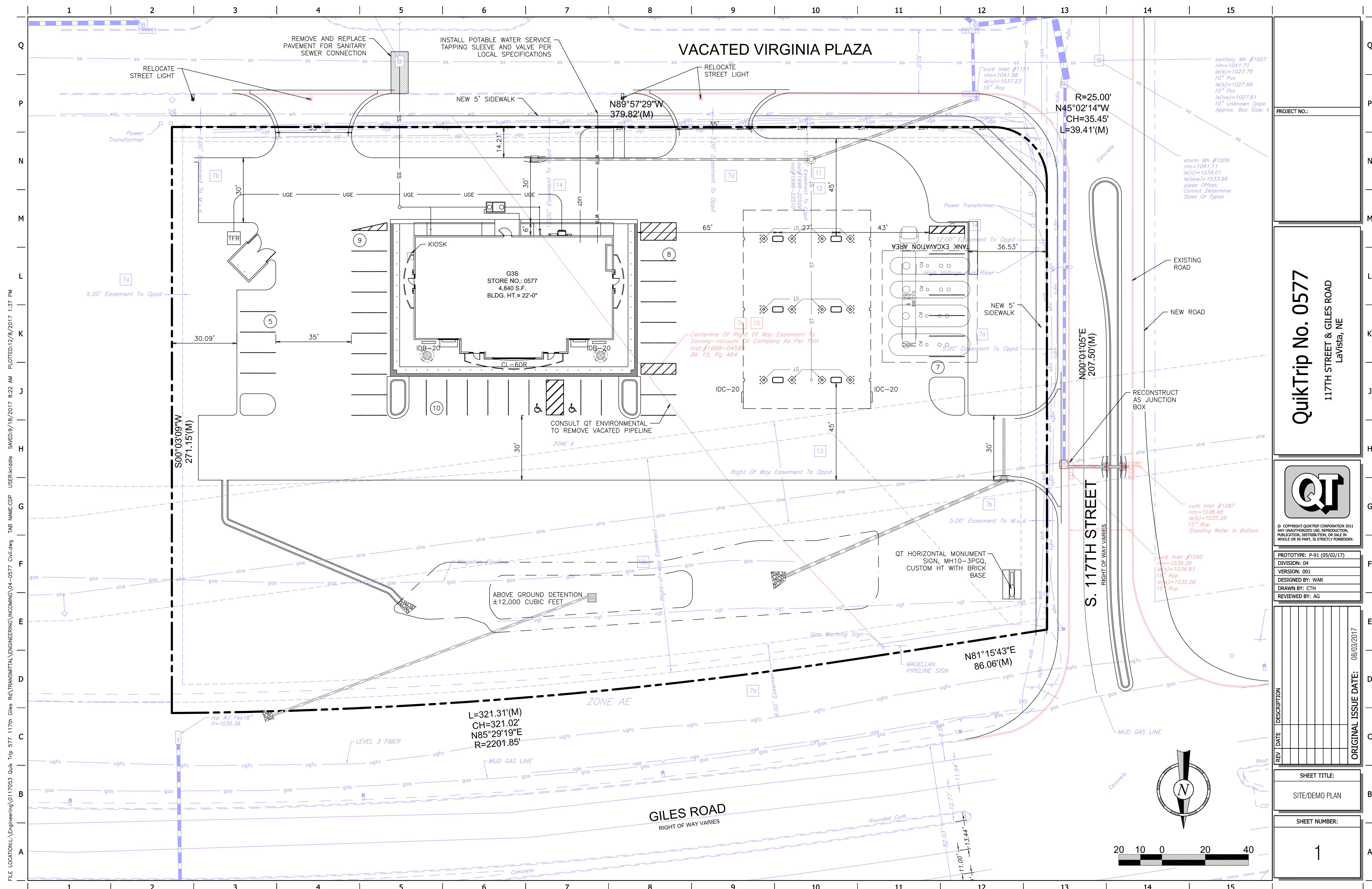
commitments regarding roadway improvements to 117th Street and signalization improvements to the intersection of 117th Street and Giles Road will need to be finalized and approved by the City and involved parties prior to the issuance of a building permit.

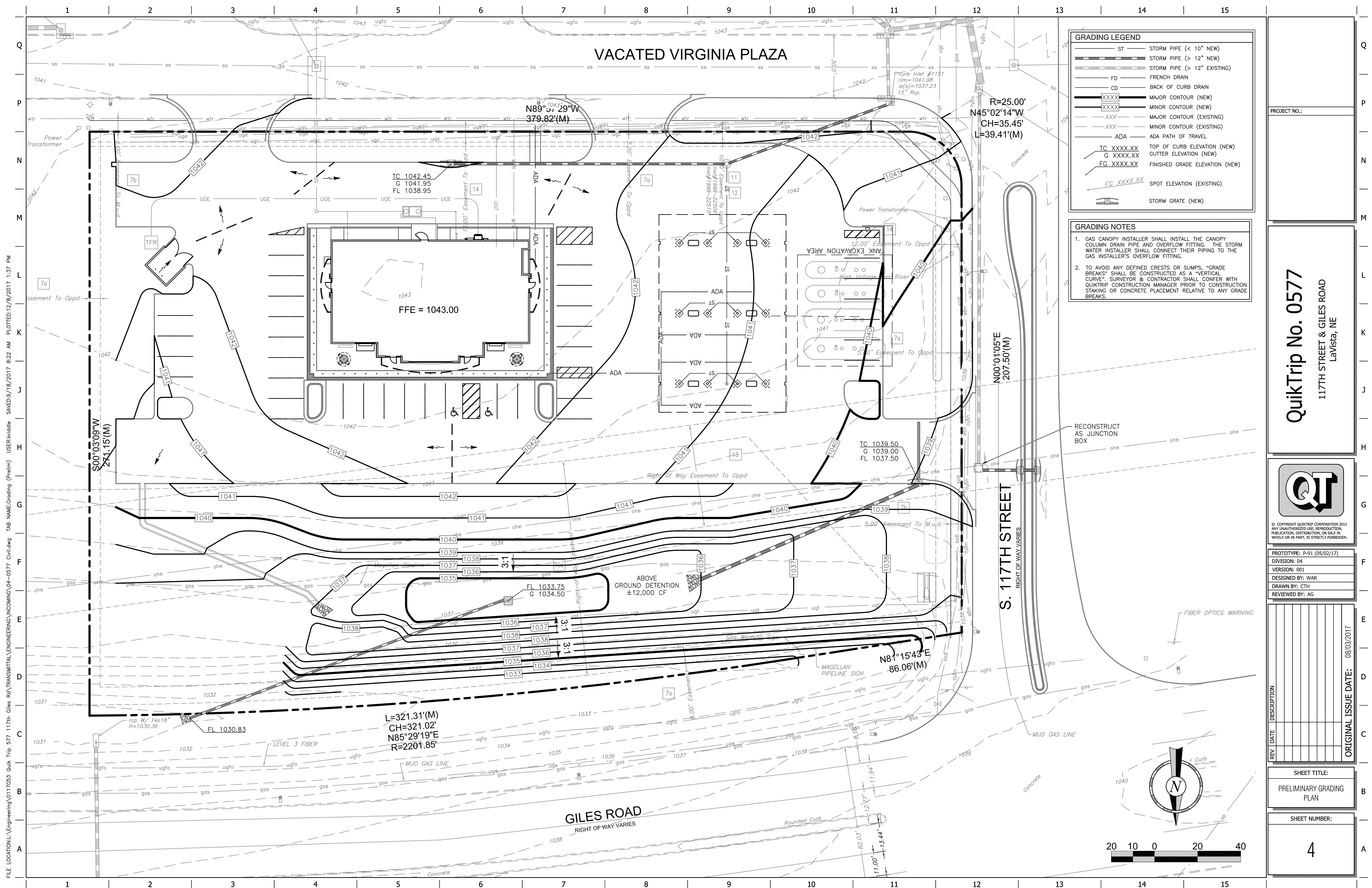
- e. The City acknowledges that the use will involve the construction, placement and maintenance of underground motor fuel storage tanks and gasoline dispensing pumps (permitted structures) on the premises. The structures shall be constructed, maintained and operated in a safe and responsible manner, and in accordance with any applicable laws, rules or regulations, including, but not limited to, applicable environmental or safety laws, as amended or in effect from time to time, and shall not cause, or create risk of injury or damage to, or loss of life, property or the environment. The owner shall make annual inspections of the premises and structures, and the operation thereof for any hazard or risk, including, but not limited to, those of an environmental or safety nature. The owner shall take immediate action to protect persons, property and the environment from any damage, injury or loss, or risk thereof, arising out of or resulting from any hazard or risk on the premises, including, but not limited to, hazard or risk involving the permitted structures, that is discovered or should be discovered (including, but not limited to, those of an environmental or safety nature) and to abate any hazard or risk and remove it from the premises in accordance with any applicable laws, rules or regulations, as amended or in effect from time to time.
- f. Owner shall obtain all required permits from the City of La Vista and shall comply with any additional requirements as determined by the City Planner.
- g. Owner shall comply (and shall ensure that all employees, invitees, suppliers, structures, appurtenances and improvements, and all activities occurring or conducted, on the premises at any time comply) with any applicable federal, state and/or local regulations, as amended or in effect from time to time, including, but not limited to, applicable environmental or safety laws, rules or regulations.
- h. Owner hereby indemnifies the city against, and holds the City harmless from, any liability, loss, claim or expense whatsoever (including, but not limited to, reasonable attorney fees and court cost) arising out of or resulting from the acts, omissions or negligence of the Owner, his agents, employees, assigns, suppliers or invitees, including, but not limited to, any liability, loss, claim or expense arising out of or resulting from any violation on the premises of any environmental or safety law, rule or regulation.

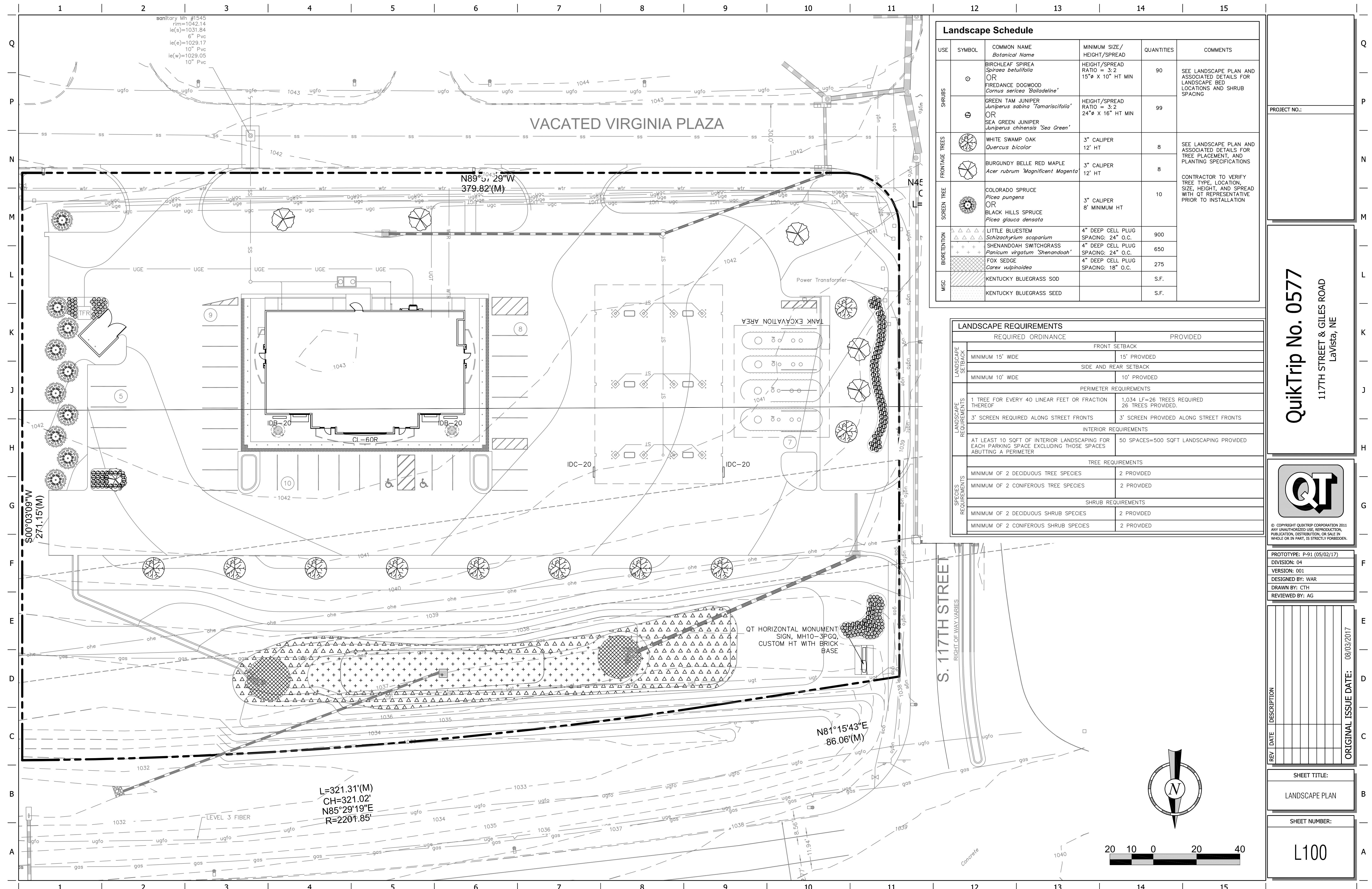
3. In respect to the Gateway Corridor Design Guidelines design criteria:

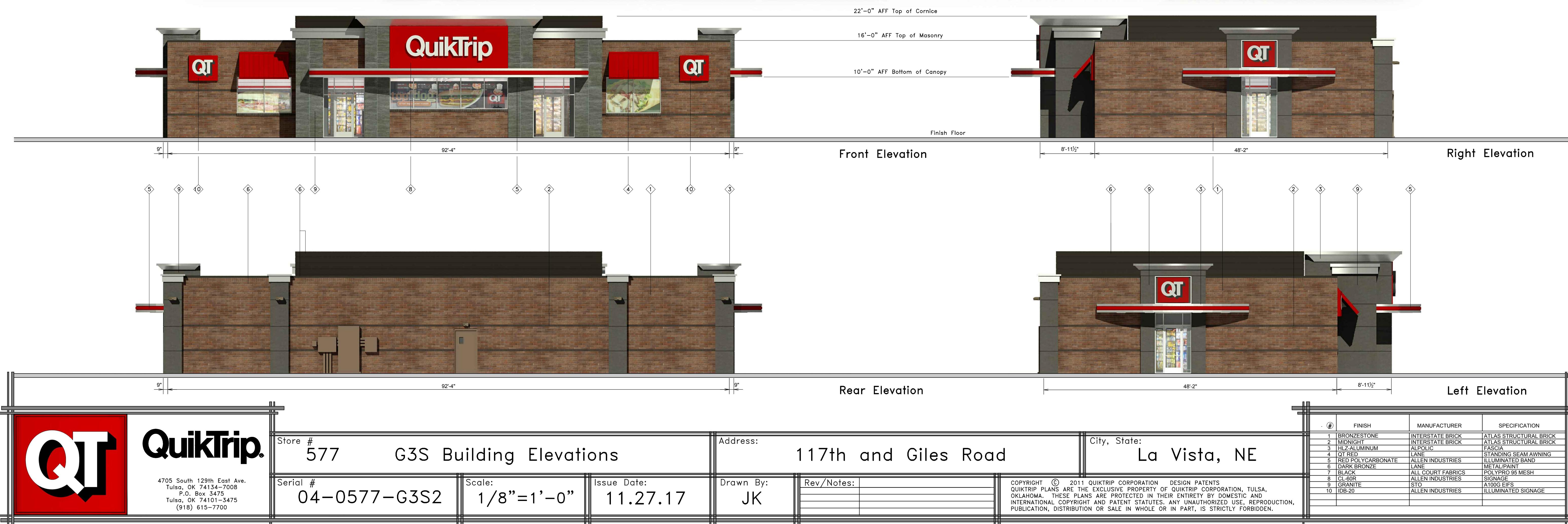
- a. Building Exterior
 - i. The convenience store shall be constructed and maintained in accordance with the CUP Plan Set (Exhibit C).
- b. Gas Pump Canopy
 - i. The vertical canopy supports shall be clad with the same brick as the building.
- c. Trash Enclosure
 - i. The three sides of the trash enclosures shall be constructed of the same brick as used on the building. Gate material on the fourth side shall be of material approved by the City.
- d. Exterior Light Fixtures
 - i. Any exterior pole-mounted light fixtures used on this project shall match the approved light fixture provided within the Gateway Corridor Design Guidelines.
 - ii. All exterior light fixtures must be submitted for approval.
- e. Landscaping
 - i. Site landscaping shall be installed and maintained in accordance with the landscaping plan provided within the CUP Plan Set (Exhibit C).
- f. Signage

Exhibit C
CUP Plan Set











Store 0577
04-0577-PE02

La Vista, NE
Date: 11.27.17 By:JK



Exhibit D
Final Traffic Memo without Exhibits



LAMP RYNEARSON

14710 West Dodge Road, Suite 100
Omaha, Nebraska 68154
[P] 402.496.2498
[F] 402.496.2730
www.LRA-inc.com

November 13, 2017

Mr. John Kottmann
City of La Vista
9900 Portal Road
La Vista, NE 68128

REFERENCE: QuikTrip #577
Final Traffic Memo
LRA Job No. 0117074.01-119

Dear Mr. Kottmann:

We have the following responses to the comments dated October 18, 2017.

1. COMMENT: In general, we concur with the analysis scenarios as developed by LRA for this study for the 2017, 2020, 2025, and 2040 analysis years. The *Nebraska Multisport Complex (NMSC) Traffic Impact Study* was used to develop the traffic volumes for this project.

RESPONSE: No response.

2. COMMENT: Page 2, Data Collection: The second paragraph refers to data obtained from MAPA to establish a growth factor (assumed to be annual) of 1.2% along Giles Road. Based upon a cursory review of recent traffic studies in the study area, the growth factor may be slightly higher than 1.2%.

Please have the applicant provide information from MAPA and the growth factor calculations in the report.

RESPONSE: The MAPA data is provided in the appendix.

3. COMMENT: Page 2, Trip Generation; Table 1: We concur with the AM and PM peak hour site generated trips for the proposed development based on the ITE Trip Generation Manual, 9th Edition. Pass-by trip calculations are provided in Table 1 but are not used in the analysis.

Please have the applicant remove the pass-by trip calculation fields from Table 1. Pass-by trips are not applied to the analysis and the inclusion of the information in the table is confusing.

RESPONSE: Pass-by trips are included in the analysis.

4. COMMENT: Figure 2, Site Plan: The site plan from Figure 2 does not match the site plan submitted to the City of La Vista on September 26, 2017. The most recent site plan depicts a raised median on 117th Street from Giles Road to Virginia Plaza.

Please have the applicant update the site plan in Figure 2 to match the most recent site plan submitted to the City. The plan should include a raised median on 117th Street.

RESPONSE: The site plan has been updated in the traffic study.

5. COMMENT: Page 4, 2017 Background Scenario; Page 10 Traffic Signal Warrant: A statement is made that traffic signal warrants are met with 2017 volumes at the intersection of 117th Street with Giles Road.

LAMP RYNEARSON COMPANIES



LAMP RYNEARSON



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LAMP RYNEARSON



In the report appendix, a graph is provided with the 2017 PM peak hour volumes on what appears to be MUTCD Warrant 3 for Peak Hour. The peak hour warrant is intended to be used in unusual cases such as intersections adjacent to manufacturing plants or industrial complexes where a shift change discharges a large number of vehicles in a short period of time. MUTCD Warrant 1 or Warrant 2 are the appropriate warrants to evaluate for typical traffic conditions. A cursory review of MUTCD traffic signal warrants indicates that the 2017 volumes do not meet the thresholds for Warrants 1 or 2.

Please have the applicant provide MUTCD traffic signal warrant spreadsheets for Warrant 1 (eight-hour) and Warrant 2 (four-hour) at the intersection of 117th Street with Giles Road. Northbound right-turns should not be counted as they would be expected to be able to enter Giles Road with minimal delay. It is not expected that a traffic signal is warranted for the existing condition (2017).

RESPONSE: The traffic signal warrant spreadsheets for the MUTCD Warrant 2 (four-hour) have been included in the appendix.

6. COMMENT: Pages 4-9 future year scenarios: The analysis has been performed assuming a traffic signal is in place at the intersection of 117th Street with Giles Road. MUTCD Warrants 1 or 2 are not expected to be satisfied with the base condition.

Please have the applicant provide MUTCD Warrant 1 and 2 spreadsheets for the various build scenarios at the intersection of 117th Street with Giles Road. Northbound right-turns should not be counted as they would be expected to be able to enter Giles Road with minimal delay. The applicant should provide an estimated year that a signal is warranted. If the traffic volume scenarios do not satisfy either of the warrants, the analysis should be updated to reflect the existing traffic control (stop sign on 117th Street).

RESPONSE: The anticipated traffic volumes on the south approach of 117th Street are expected to satisfy Warrant 2 in the MUTCD, four-hour warrant, when the store opens opening day. The traffic signal has been included in all of the future build-out scenarios.

7. COMMENT: Pages 4-9, future year scenarios: The analysis has been performed assuming a single northbound lane at the intersection of 117th Street with Giles Road. The site plan submitted to the City of La Vista on September 26, 2017 appears to provide 24 feet of width on the northbound approach. This is consistent with the area practice of providing two approach lanes to a signalized intersection (if warranted).

Please have the applicant update the analysis to include two northbound approach lanes at the intersection of 117th Street with Giles Road if traffic volumes satisfy MUTCD traffic signal warrants. If the traffic volume scenarios do not satisfy either of the warrants, the analysis should be updated to reflect a single northbound lane and the existing traffic control.

RESPONSE: The intersection of 117th Street and Giles Road has been updated to a three-lane section in the build-out scenarios.

8. COMMENT: Page 11, first bullet: A statement is made that dual left-turn lanes will be needed by 2040 for the east and south legs of the intersection of 114th Street with Giles Road. A review of the 2040 background traffic indicates over 500 northbound lefts and 150 westbound lefts. Standard practice for provision of dual left-turn lanes is when hourly left-turn volumes exceed 200 vehicles. We concur with the need for northbound dual lefts. The need for westbound dual lefts is questionable based upon the projects volumes.

QuikTrip #577
Final Traffic Memo
November 13, 2017
Page 3 of 3

Please have the applicant provide further documentation for why westbound dual left-turns are needed. Additional time could be allocated to the westbound left-turn phase if needed.

RESPONSE: With the additional analysis, the westbound dual left turn lanes are not needed with reallocation of time at the signal for this phase. The recommendation for the westbound dual left turn lanes has been removed and the analysis has been updated.

9. COMMENT: The study should be sealed and signed by a professional engineer licensed in the state of Nebraska.

RESPONSE: The final traffic study has been signed by a licensed professional engineer in the state of Nebraska.

Thank you for your timely attention to this project. Please do not hesitate to contact me if you need further information.

Sincerely,

LAMP RYNEARSON



Matthew L. Kruse, P.E., PTOE
Senior Project Manager

gtl\L\Engineering\0117074 QuickTrip Traffic Study 117th and Giles\ADMINRSP Kottmann 171113.docx



QUIKTRIP #577 117TH STREET AND GILES ROAD

November 2017

FINAL TRAFFIC MEMO

LRA Job Number 0117074.01-119



Prepared For

QuikTrip Corporation
&
City of La Vista



Lamp, Rynearson & Associates, Inc.

14710 West Dodge Rd Ph: 402.496.2498
Omaha, Ne 68154 Fax: 402.496.2730

www.LRA-INC.com

INTEROFFICE MEMORANDUM

TO: JOE FLAXBEARD
FROM: MATTHEW KRUSE
SUBJECT: QUIKTRIP TRAFFIC ANALYSIS
DATE: NOVEMBER 10, 2017
CC:



Introduction:

Lamp Rynearson was contacted to provide engineering services for a proposed QuikTrip located at 117th Street and Giles Road in La Vista, Nebraska. Currently, the site consists of undeveloped land. The proposed layout of the site would consist of three access points. One access point is located along 117th Street and two access points are located along Virginia Street. There is currently a median at the intersection of 114th Street and Virginia Street so all traffic that would use Giles Road would have to do so from 117th Street. The overall site location is shown in Figure 1 of the study and a current aerial is included in Figure 2.

Giles Road is currently a four lane section in the vicinity of the site with a posted speed limit of 45 miles per hour. Left turn lanes are located along both the east and west leg at the 114th Street. There is also a westbound left turn lane at the intersection of 117th Street and Giles Road. Both of the intersections along Giles Road have an eastbound right turn lane. Currently, both of the analyzed intersections are "T" intersections with no north leg. One of the analyzed intersections is signalized, which is 114th Street while 117th Street is unsignalized. The existing geometry is shown in Figure 3.

The goal of this traffic analysis was to estimate the level of service and queue lengths at the proposed access points along with investigating any roadway improvements that may be required with the installation of the store. The trips for the proposed Nebraska Multisports Complex were also included for a portion of the analysis as part of this study, which was assumed to be built by the year 2020. The methodology for the traffic analysis and the overall findings are included and summarized in this traffic memo.

Data Collection:

Traffic counts were conducted by LRA staff on Tuesday, August 8, 2017 in the study area along Giles Road at the intersections of 114th Street and 117th Street. These traffic counts took place from 7:00 am to 9:00 am and from 4:00 pm to 6:00 pm to determine the AM and PM peak hours. The peak hour of the traffic observed in the traffic counts occurred during the PM peak hour, which took place from 4:30 pm to 5:30 pm. The AM peak hour was found to occur from 7:15 am to 8:15 am. Figure 4 shows the 2017 background traffic volumes for the AM peak hour while the PM peak hour volumes can be found in Figure 5.

Based on data obtained from MAPA, an overall growth factor was calculated at approximately 1.2 percent along Giles Road. This growth rate was then added to the year 2020, year 2025 and year 2040 background volumes. The 2020 AM background scenario is shown in Figure 6 with the PM in Figure 7. The 2025 background scenario is shown in Figure 8 for the AM peak hour and Figure 9 for the PM peak hour. Figure 10 shows the 2040 AM background scenario while Figure 11 shows the 2040 PM background scenario. The multisports complex volumes are shown in Figure 12.

Comments received from the City of La Vista stated their preference to use either the 8 hour or 4 hour traffic volume warrants in the Manual on Uniform Traffic Control Devices (MUTCD). With this in mind, a traffic count was conducted on a similar QuikTrip in the metro area to obtain data in regards to the traffic that is generated from that site and correlate that data to this proposed QuikTrip site. This count took place from 7:00 am to 9:00 am and from 4:00 pm to 6:00 pm on November 2, 2017. There were 16 pumps at this gas station, thus the total entering and exiting vehicles were decreased proportionally to estimate the trips for a 12 pump gas station.

Trip Generation:

The area studied as part of this traffic study is currently undeveloped land. The goal of this study was to estimate the impact on the surrounding roadway network after the addition of the gas station. A trip generation table was complete to estimate the number of trips generated by the gas station.

The vehicle trips generated the proposed development were estimated with two different methods. The first way was using standard trip generation rates, as published in the ITE *Trip Generation Manual*, 9th Edition, 2014. The second method was by counting the incoming and outgoing traffic at a similar QuikTrip site in the metro area. A detailed breakdown of the trip generation rates is shown in Table 1 for the daily AM and PM peak hour. The observed traffic volumes were larger than the estimated vehicle trips from the ITE manual. Since the counts were obtained at a similar QuikTrip site in the metro area they were expected to be more accurate and were used for the trip generation and trip distribution as part of this study. The observed vehicle trips were directionally distributed onto the roadway network using directional percentages calculated from the existing travel patterns found from the background traffic volumes collected in the traffic counts.

The traffic pattern for the number of cars entering the development at each location was determined based on the location of the gas station. The AM and PM peak hour trip distributions can be found in Figures 13 and 14. These site generated trips are then added to the 2020, 2025 and 2040 background traffic volumes to estimate the scenario build out volumes for the AM and PM peak hour for the proposed school. Figure 15 and Figure 16 show the 2020 full build-out volumes. The 2020 full build-out volume with the sports complex is shown in Figure 17. The AM 2025 full build-out scenario can be found in Figure 18 with the PM shown in Figure 19. The 2025 full build-out volume with the sports complex is shown in Figure 20. Figure 21 shows the AM 2040 full build-out scenario with Figure 22 showing the PM. The 2040 full build-out volume with the sports complex is shown in Figure 23.

Traffic Analysis:

Synchro analysis was completed on two intersections around the development in the background and full build-out scenarios. The level of service (LOS) was then determined based on the Synchro inputs. LOS is a measure of effectiveness for intersection operating conditions, and is based on delay experienced by vehicles passing through the intersection. LOS ranges from "A" to "F," with LOS "A" representing little or no delay, and LOS "F" representing extreme delay. LOS "C" or better is considered desirable, LOS "D" being acceptable in some urban situations. The qualitative definition of each category can

be found in the Appendix. The following Table 2 shows the intersection LOS Criteria for both signalized and unsignalized intersection (HCM 2010):

Table 2 – Intersection LOS Criteria

LEVEL OF SERVICE	Signalized Control Delay Range	Unsignalized Control Delay Range
A	≤ 10 seconds	≤ 10 seconds
B	>10 and ≤ 20 seconds	>10 and ≤ 15 seconds
C	>20 and ≤ 35 seconds	>15 and ≤ 25 seconds
D	>35 and ≤ 55 seconds	>25 and ≤ 35 seconds
E	>55 and ≤ 80 seconds	>35 and ≤ 50 seconds
F	>80 seconds	>50 seconds

The intersections that were analyzed as part of this study included 114th Street and Giles Road and 117th Street and Giles Road. The 114th Street and Giles Road intersection is a signalized intersections. The intersection of 117th Street and Giles Road is an unsignalized intersection. The Synchro outputs are included in the appendix.

2017 Background Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: The overall intersection is shown to operate at a LOS of B in the AM and PM peak hour. All individual movements except for one operate at a LOS of C or better. The northbound left turning movement operates at a LOS of D in the AM peak hour and a LOS of E in the PM peak hour.
- 117th Street & Giles Road: The northbound full movement operates at a LOS of C in the AM peak hour and a LOS of F in the PM peak hour. The westbound left turning movement operates at a LOS of A in the AM peak hour and a LOS of B in the PM peak hour.

The 2017 Background LOS and the corresponding delays are included in Figure 24.

2020 Background Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: The overall intersection is shown to operate at a LOS of B in the AM and PM peak hour. All individual movements except for two operate at a LOS of B or better. The westbound left turning movement operates at a LOS of D in the PM peak hour. The northbound left turning movement operates at a LOS of D in the AM peak hour and a LOS of E in the PM peak hour.
- 117th Street & Giles Road: The westbound left movement is anticipated to operate at a LOS of A in the AM peak hour and a LOS of B in the PM peak hour. The northbound full movement is anticipated to operate at a LOS of D in the AM peak hour and a LOS of F in the PM peak hour.

The 2020 Background LOS and the corresponding delays are included in Figure 25.

2025 Background Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: The overall intersection is shown to operate at a LOS of B in both the AM and PM peak hour. All individual movements except for two operate at a LOS of C or better. The westbound left turning movement is anticipated to operate at a LOS of E in the PM peak hour. The northbound left turning movement is anticipated to operate at a LOS of D in the AM peak hour and a LOS of F in the PM peak hour.

A recommended improvement to this intersection would be to turn the westbound left turning movement to a permitted/protected phase. This proposed improvement is anticipated to improve the performance of the individual movements where they all operate at a LOS of D or better.

- 117th Street & Giles Road: The westbound left turning movement is anticipated to operate at a LOS of B in the AM peak hour and a LOS of C in the PM peak hour. The northbound movement is shown to operate at a LOS of D in the AM peak hour and a LOS of F in the PM peak hour.

The 2025 Background LOS and the corresponding delays are included in Figure 26. The 2025 Background LOS with improvements is shown in Figure 27.

2040 Background Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: The overall intersection is shown to operate at a LOS of C in the AM peak hour and a LOS of E in the PM peak hour. Three individual movements operate at a LOS of D or worse. The westbound and northbound left turning movements are shown to operate at a LOS of F in the PM peak hour. The eastbound through movement is anticipated to operate at a LOS of E in the PM peak hour.

Adding dual left turn lanes to the south leg of the intersection would help improve the overall performance of the intersection. It is anticipated that, by adding dual left turn lanes to this approach, it would eliminate the LOS of F at the various movements. With this improvement, the overall intersection is shown to operate at a LOS of C in both the AM and PM peak hour. All individual movements except for two are shown to operate at a LOS of D or better. The northbound left turning movement is shown to operate at a LOS of E in the PM peak hour. The westbound left turning movement is shown to operate at a LOS of E in the PM peak hour.

- 117th Street & Giles Road: The westbound left turning movement is anticipated to operate at a LOS of B in the AM peak hour and a LOS of C in the PM peak hour. The northbound movement is shown to operate at a LOS of F in both the AM and PM peak hour.

The 2040 Background LOS and the corresponding delays are included in Figure 28.

The 2040 Background LOS with Improvements is shown in Figure 29.

2020 Build-out Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: The overall intersection is shown to operate at a LOS of B in both the AM and PM peak hour. All individual movements except for two operate at a LOS of C or better. The westbound left turning movement operates at a LOS of F in the PM peak hour. The northbound left turning movement operates at a LOS of D in the AM peak hour and a LOS of F in the PM peak hour.

A recommended improvement to this intersection would be the addition of a permitted/protected phase on the westbound left movement. This is also recommended in the 2025 background scenario.

- 117th Street & Giles Road: The westbound left turning movement is anticipated to operate at a LOS of B in the AM peak hour and a LOS of C in the PM peak hour. The northbound movement operates at a LOS of F in both the AM and PM peak hour.

With the addition of the QuikTrip development, 117th Street is planned to be widened to a three lane section. Based off the Manual on Uniform Traffic Control Devices (MUTCD), this intersection meets the warrant for a traffic signal based on Warrant 2 – four hour traffic volume warrant. With these improvements, the overall intersection operates at a LOS of A in the AM and a LOS of B in the PM peak hour. All individual movements are shown to operate at a LOS of D or better.

The 2020 Build-out LOS and the corresponding delays are included in Figure 30.

The 2020 Build-out LOS with Improvements are shown in Figure 31.

2020 Build-out Scenario with Sports Complex

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: The overall intersection is shown to operate at a LOS of B in the AM and a LOS of C in the PM peak hour. All individual movements except for two operate at a LOS of C or better. The westbound left turning movement is shown to operate at a LOS of F in the PM peak hour. The northbound left turning movement is shown to operate at a LOS of D in the AM peak hour and a LOS of F in the PM peak hour.
- 117th Street & Giles Road: The overall intersection is shown to operate at a LOS of A in both the AM and PM peak hour. All individual movements except for the northbound full movement operate at a LOS of A or better. The northbound movement is shown to operate at a LOS of F in both the AM and PM peak hour.

The 2020 Build-out LOS with the Sports Complex and the corresponding delays are included in Figure 32.

Since the build-out scenario meets the warrant for a traffic signal at the Giles Road and 117th Street Intersection, another figure showing the addition of the traffic signal was added. The 2020 Build-out LOS with the Sports Complex and Improvements is shown in Figure 33.

2025 Build-out Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: This analysis includes the westbound left permitted/protected phase from the 2025 background scenario. The overall intersection is shown to operate at a LOS of C in both the AM and PM peak hour. All individual movements except for one operate at a LOS of D or better. The northbound left turning movement is shown to operate at a LOS of E in the PM peak hour.

- 117th Street & Giles Road: The overall intersection is shown to operate at a LOS of A in both the AM and PM peak hour. All individual movements except for the northbound movement operates at a LOS of B or better. The northbound movement operates at a LOS of C in the AM peak hour and a LOS of D in the PM peak hour.

The 2025 Build-out LOS and the corresponding delays are included in Figure 34.

2025 Build-out Scenario with Sports Complex

The intersection's overall and individual movements are discussed in further detail below. There is very little change with the additional trips to and from the sports complex.

- 114th Street & Giles Road: This analysis includes the westbound left permitted/protected phase from the 2025 background scenario. The overall intersection is shown to operate at a LOS of C in the AM peak hour and a LOS of D in the PM peak hour. All individual movements except for one are anticipated to operate at a LOS of D or better. The northbound left turning movement is shown to operate at a LOS of E in the PM peak hour.
- 117th Street & Giles Road: The overall intersection is shown to operate at a LOS of A in the AM peak hour and a LOS of B in the PM peak hour. All individual movements except for the northbound left turning movement operates at a LOS of C or better. The northbound left turning movement is shown to operate at a LOS of D in both the AM and PM peak hour.

The 2025 Build-out LOS with Sports Complex are included in Figure 35.

2040 Build-out Scenario

The intersection's overall and individual movements are discussed in further detail below.

- 114th Street & Giles Road: This analysis includes the westbound left permitted/protected phase from the 2025 background scenario. The overall intersection is shown to operate at a LOS of C in the AM peak hour and a LOS of D in the PM peak hour. All individual movements except for two operate at a LOS of D or better. The westbound left turning movement is shown to operate at a LOS of E in the PM peak hour. The northbound left turning movement is anticipated to operate at a LOS of E in the PM peak hour.
- 117th Street & Giles Road: The overall intersection is shown to operate at a LOS of A in the AM peak hour and a LOS of B in the PM peak hour. All individual movements except for the northbound left turning movement operates at a LOS of B or better. The northbound left turning movement is shown to operate at a LOS of D in both the AM and PM peak hour.

The 2040 Build-out LOS and the corresponding delays are included in Figure 36.

2040 Build-out Scenario with Sports Complex

The intersection's overall and individual movements are discussed in further detail below. Similar to the other sports complex scenarios, there is very little change shown with the additional trips to and from the sports complex.

- 114th Street & Giles Road: This analysis includes the westbound left permitted/protected phase from the 2025 background scenario. The overall intersection is shown to operate at a LOS of C in the AM peak hour and a LOS of D in the PM peak hour. All individual movements except for two operate at a LOS of D or better. The westbound and northbound left turning movements are shown to operate at a LOS of E in the PM peak hour.
- 117th Street & Giles Road: The overall intersection is shown to operate at a LOS of A in the AM peak hour and a LOS of B in the PM peak hour. All individual movements are shown to operate at a LOS of D or better.

The 2040 Build-out LOS with the Sports Complex are included in Figure 36.

Queue Length Analysis:

Based on the volumes used in the previous analysis, the anticipated vehicle queue lengths were determined using the Synchro Software. The 95th percentile shows the five highest representative volumes of one hundred cycles and is considered to be the maximum queue length that will be experienced at the intersection. The 50th percentile shows the maximum queue for a typical cycle. The longest anticipated delay is shown in the 2040 build-out scenario with the sports complex. The 95th percentile eastbound through movement delay at this scenario is shown to be 1005 feet. However, this does not block any intersections and would only occur for a very short period of time on the few occasions where the sports complex was being completely utilized. In the 2040 full build-out scenario (without the sports complex), the 95th percentile queue is shown to be 955 feet.

The intersection of 117th Street and Virginia Street was analyzed for right and left turn lane warrants and it is not anticipated to meet any warrants based on the NCHRP 279. The individual movements at this intersection are anticipated to operate at a LOS of A in both the AM and PM peak hour in every scenario.

Traffic Signal Warrant:

In the preliminary report, a traffic warrant analysis was completed using Warrant 3 – peak hour volume warrant. The intersection of 117th Street and Giles Road was anticipated to meet this warrant. The comment was received that the City of La Vista would prefer to see the analysis of Warrant 1 – eight hour traffic volume warrant or Warrant 2 – four hour traffic volume warrant, instead of the peak hour traffic volume warrant. As has been described, additional traffic data was collected at a similar QuikTrip site in the metro area to allow for analysis to be completed on the four hour traffic volume warrant. Based on the estimated trips on the south approach of 117th Street and the volumes collected in the field on Giles road, the intersection of 117th Street and Giles Road is anticipated to meet Warrant 2 – four hour traffic volume warrant during the opening year of the site. A graph of the Manual of Uniform Traffic Control Devices (MUTCD) four hour warrant graph is

provided in the Appendix. The left turning vehicles for the south approach of 117th Street at the Giles Road intersection were calculated as shown in the table below.

<u>Hour</u>	<u>Volume</u>				<u>Left</u>	<u>Turning</u>	<u>Cars</u>	<u>Background</u>		<u>Total</u>
					<u>Percent</u>			<u>Left</u>		
7:00-8:00 (Hour 1)	191	X	(12/16)	=	143	X	0.57	=	82	+ 11 = 93
8:00-9:00 (Hour 2)	164	X	(12/16)	=	123	X	0.57	=	70	+ 22 = 92
4:00-5:00 (Hour 3)	208	X	(12/16)	=	156	X	0.40	=	62	+ 80 = 142
5:00-6:00 (Hour 4)	198	X	(12/16)	=	149	X	0.40	=	60	+ 57 = 117

Conclusions:

- The QuikTrip is proposed to have 12 vehicle pumping stations with three exits. One exit is located along 117th Street while two are located along Virginia Street.
- Traffic counts were conducted by LRA in August 2017 at two intersections along Giles Road at 114th Street and 117th Street. After preliminary comments were received, additional traffic counts were obtained from QuikTrip Store 585 for the same four hours as the peak hour traffic counts.
- With the addition of the QuikTrip development, 117th Street is planned to be widened to a three lane section at the request of the City of La Vista.
- The anticipated growth rate for this area was calculated to be 1.2 percent based on the existing traffic counts and the future traffic projections provided by the Metropolitan Area Planning Agency (MAPA).
- According to the MUTCD Warrant 2 – four hour traffic volume warrant, the intersection of 117th Street and Giles Road meets the warrant for a traffic signal in when the QuikTrip Store opens.
- If a signal is installed at the intersection of 117th Street and Giles Road, the intersection is shown to operate at an acceptable level with a three lane section on the south approach of 117th Street and the existing geometry on Giles Road.
- By the year background year 2025 or the build-out year 2020, it is recommended that the intersection of 114th Street and Giles Road will need a permitted/protected phase for the left turn lane on the east leg of the intersection.

- Based on the background traffic volumes and the growth information provided by MAPA, the intersection of 114th Street and Giles Road will need dual left turn lanes along the south leg of the intersection in the background year 2040. These improvements are based on the background traffic alone and is not from the addition of the QuikTrip development trips.
- The Nebraska Multisport Complex was assumed to be built by 2020 and was added to the build-out volumes with separate figures.
- Based on the NCHRP 279, the intersection of 117th Street and Virginia Street is not anticipated to meet the warrant for a right or left turn lane. All individual movements are shown to operate at a LOS of A in both peak hours in all scenarios.
- The site is not anticipated to have any queuing problems.

