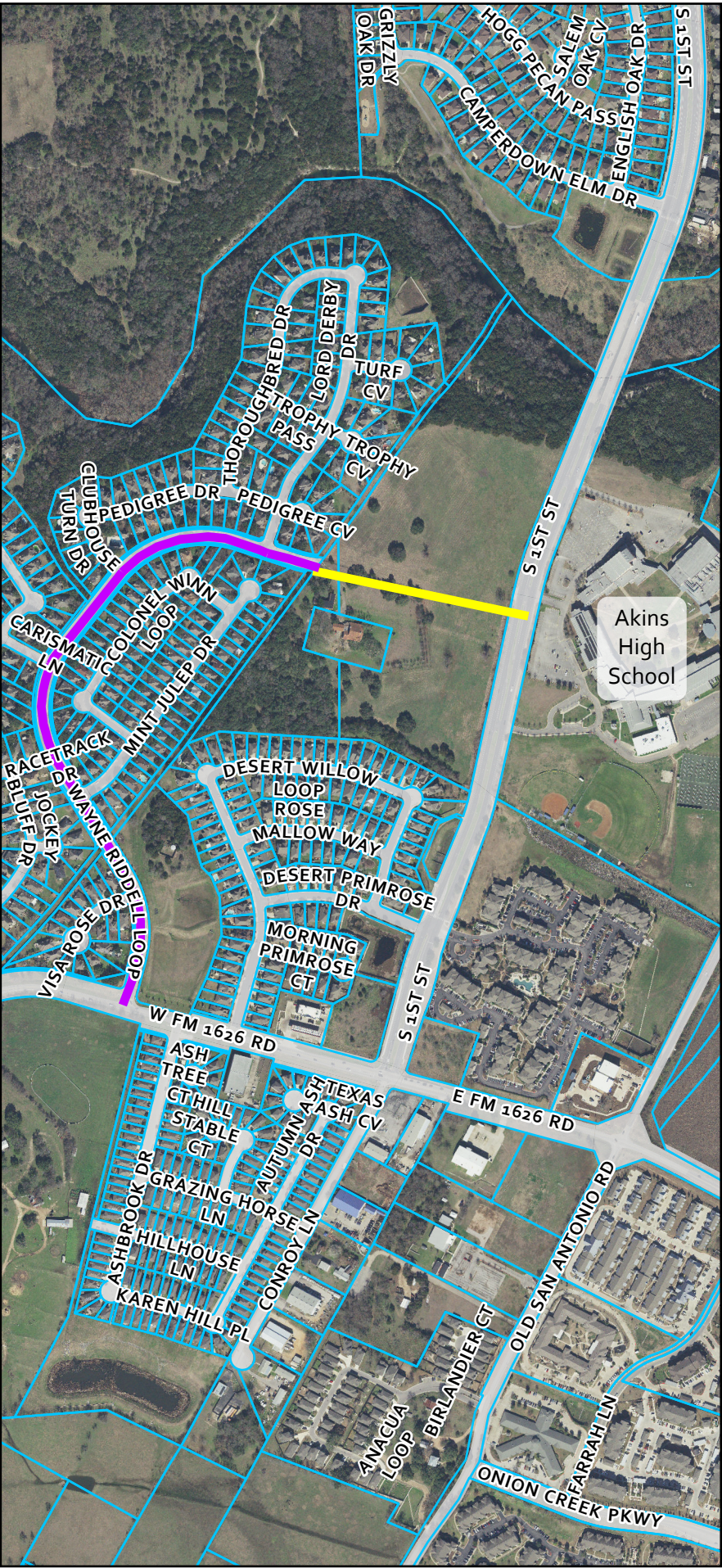


Wayne Riddell Loop Extension as adopted in the ASMP



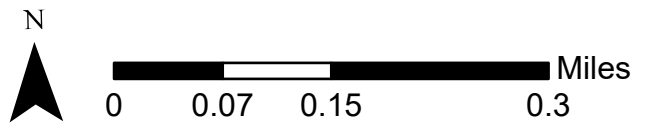
ASMP Street Table

Name	WAYNE RIDDELL LOOP
Segment Limits	Lord Derby Dr to S. 1st St
Type	Local Mobility
Street Level	2
Priority Network	-
Improvement	New Roadway
Existing Cross Section	DNE
Existing Number of Lanes	0
Future Cross Section	2U
Future Number of Lanes	2
Roadway Description	2 Travel Lanes
Existing Bicycle Facility	-
Future Bicycle Facility	-
Bicycle Description	All Ages and Abilities Bicycle Facilities
Pedestrian Description	-
Project Description	The Improvements Include Constructing A New Roadway with All Ages and Abilities Bicycle Facilities and Sidewalks.
Mean ROW	0
Median ROW	0
Minimum ROW	0
Maximum ROW	0
Required ROW	78
ROW Remarks	Future Road. ROW Assumed to Be Acquired for Ideal Cross Section.
District	5
SORT_ORDER	18134

Legend

- Wayne Riddell Loop (Existing Road)
- Wayne Riddell Loop (Connection - New Road)
- TCAD Parcels
- Existing Right-of-Way (ROW)

Attachment B



This map has been produced by the Planning Development Review Department for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

EDUCATIONAL IMPACT STATEMENT

Prepared for the City of Austin

Austin
Independent
School District



PROJECT NAME: Wayne Riddell Loop

ADDRESS/LOCATION: 10801 Wayne Riddell Loop

CASE #: C14-2019-0129

☐ NEW SINGLE FAMILY

☐ DEMOLITION OF MULTIFAMILY

☒ NEW MULTIFAMILY

☐ TAX CREDIT

SF UNITS: _____ STUDENTS PER UNIT ASSUMPTION
Elementary School: _____ Middle School: _____ High School: _____

MF UNITS: 750 STUDENTS PER UNIT ASSUMPTION
Elementary School: .025 Middle School: .008 High School: .014

IMPACT ON SCHOOLS

The student yield factor of 0.047 (across all grade levels) for apartment homes was used to determine the number of projected students. This factor was provided by the district's demographer and is based on other market rate multi-family complexes built in the last five years within close proximity to the proposed location.

The 750-unit multifamily development is projected to add approximately 36 students across all grade levels to the projected student population. It is estimated that of the 36 students, 19 will be assigned to Menchaca Elementary School, 6 to Paredes Middle School, and 11 to Akins High School.

The percent of permanent capacity by enrollment for SY 2024-25, including the additional students projected with this development, would be within the new target range of 85-110% at Menchaca ES (91%) and Akins ECHS (104%), and below the target range at Paredes (58%). The projected additional students at Paredes would not offset the anticipated decline in student enrollment. All of these schools will be able to accommodate the projected additional student population from the proposed development.

TRANSPORTATION IMPACT

Students within the proposed development attending Menchaca ES and Paredes MS will qualify for transportation due to the distance of the schools from the proposed development. An increase of one bus may be required for the afternoon Menchaca route. Akins ECHS is located within 2 miles of the proposed development; therefore, students would not qualify for transportation unless a hazardous route condition is identified.

SAFETY IMPACT

There are not any identified safety impacts at this time.

Date Prepared: 05/27/2020

Executive Director: Beth Wilson
Beth Wilson

Attachment C

EDUCATIONAL IMPACT STATEMENT

Prepared for the City of Austin

Austin
Independent
School District



DATA ANALYSIS WORKSHEET

ELEMENTARY SCHOOL: Menchaca

RATING: Met Standard

ADDRESS: 1218 West FM 1626

PERMANENT CAPACITY: 824

% QUALIFIED FOR FREE/REDUCED LUNCH: 39.15%

MOBILITY RATE: -14.9%

POPULATION (without mobility rate)

ELEMENTARY SCHOOL STUDENTS	2019-20 Population	5- Year Projected Population (without proposed development)	5-Year Projected Population (with proposed development)
Number	855	929	948
% of Permanent Capacity	104%	113%	115%

ENROLLMENT (with mobility rate)

ELEMENTARY SCHOOL STUDENTS	2019-20 Enrollment	5- Year Projected Enrollment (without proposed development)	5-Year Projected Enrollment (with proposed development)
Number	728	732	751
% of Permanent Capacity	88%	89%	91%

MIDDLE SCHOOL: Paredes

RATING: Needs Improvement

ADDRESS: 10100 S. Mary Moore Searight Dr.

PERMANENT CAPACITY: 1,156

% QUALIFIED FOR FREE/REDUCED LUNCH: 51.77%

MOBILITY RATE: -28.8%

POPULATION (without mobility rate)

MIDDLE SCHOOL STUDENTS	2019-20 Population	5- Year Projected Population (without proposed development)	5-Year Projected Population (with proposed development)
Number	1,280	993	999
% of Permanent Capacity	111%	86%	87%

ENROLLMENT (with mobility rate)

MIDDLE SCHOOL STUDENTS	2019-20 Enrollment	5- Year Projected Enrollment (without proposed development)	5-Year Projected Enrollment (with proposed development)
Number	912	665	671
% of Permanent Capacity	79%	58%	58%

EDUCATIONAL IMPACT STATEMENT

Prepared for the City of Austin

Austin
Independent
School District



HIGH SCHOOL: Akins	RATING: Met Standard
ADDRESS: 10701 S. First St.	PERMANENT CAPACITY: 2,394
% QUALIFIED FOR FREE/REDUCED LUNCH: 39.89%	MOBILITY RATE: -16.9%

POPULATION (without mobility rate)			
HIGH SCHOOL STUDENTS	2019-20 Population	5- Year Projected Population (without proposed development)	5-Year Projected Population (with proposed development)
Number	3,317	3,134	3,145
% of Permanent Capacity	139%	131%	131%

ENROLLMENT (with mobility rate)			
HIGH SCHOOL STUDENTS	2019-20 Enrollment	5- Year Projected Enrollment (without proposed development)	5-Year Projected Enrollment (with proposed development)
Number	2,755	2,484	2,495
% of Permanent Capacity	115%	104%	104%

March 3, 2020 ZAP Q & A Report

B 3 Zoning: [C14-2019-0129 - 10801 Wayne Riddell Loop; District 5](#)

Question: Commissioner King

Given its proximity to Slaughter Creek, does this case involve any environmental issues that should or must be reviewed by the Environmental Commission prior to review by ZAP?

Answer: Staff

A drainage study, an environmental assessment and a tree survey are not required for standard (non-PUD) zoning cases. These items will be submitted at the time a subdivision or site plan application is filed with the City and greater detail about the proposed development is required.

B 7 Site Plan: [SP-2019-0108D - Thaxton Road Tract Offsite Wastewater Improvements; District 2](#)

Question: Commissioner Aguirre

Answer: Staff (in Bold)

Question 1: Please provide a breakdown of new wastewater lines (since 2013) that are located in creeks and CWQZs. Please provide a list of their locations and a map indicating where these are located.

Response 1 Austin Water (AW) staff have verified with Austin Watershed Protection Department staff that there have been no variances requested or granted for construction of wastewater lines in the inner half of any critical water quality zone (CWQZ) since the establishment of current environmental criteria prohibiting construction of utility lines parallel and within the inner half of the CWQZ in 2013.

Per current code, a utility line may be located parallel to and within the CWQZ if 1) in an urban watershed and not less than 50-ft from the centerline of a waterway, or 2) in a watershed other than urban and located not less than 50-ft from the centerline of a minor waterway, 100-ft from centerline of an intermediate waterway, and 150-ft from the centerline of a major waterway.

Rhoades, Wendy

From: Rivera, Andrew

Sent: Wednesday, April 01, 2020 9:31 AM

To: Rhoades, Wendy <Wendy.Rhoades@austintexas.gov>

Subject: Questions for Staff – 10801 Wayne Riddell Loop (C14-2019-0129)

Hi Wendy,

Please see questions from Commissioner Smith.

Thank you,

Andrew

Questions for Staff – 10801 Wayne Riddell Loop (C14-2019-0129)

1. What are the requirements of the applicant with respect to the Wayne Riddell Loop extension with any site plan application?
 - a. Are they required to dedicate the right-of-way to the City for the purposes of the roadway construction? **Response:** Yes, ROW will be dedicated at time of subdivision or site plan.
 - b. Are they required to build the connection? **Response:** Yes, the extension will be constructed at time of subdivision or site plan.
 - c. Can anything be constructed in the planned area of the roadway connection? **Response:** Only the Wayne Riddell Loop extension will be constructed in the planned area of the roadway connection. The applicant has split their development in two phases: one to the north and one to the south of this proposed extension.
 - d. Is the signal at South 1st Street at the new connection included in the ASMP? **Response:** The Austin Strategic Mobility Plan (ASMP) identifies the signalization of the South 1st Street / Akins High School Driveway intersection as part of the long range transportation strategy in the area. The traffic signal was separately identified in the traffic impact analysis (TIA) as a required improvement to ensure the intersection operated safely and at an acceptable level once the Wayne Riddell Loop extension construction was complete and the site was fully developed. The traffic signal request from the ASMP did not play a role in ATD's decision to require a traffic signal at the future Wayne Riddell Loop / South 1st Street intersection.
2. Existing Wayne Riddell Loop is 40 feet wide without any pavement markings; are there any plans for ATD to improve this street? What could be done? **Response:** No improvements to the existing portion of Wayne Riddell Loop were identified with this project. We spoke with a member of the homeowner's association and offered speed mitigation measures (speed humps, speed signs, etc.) that could be requested if issues with speeding arise after the construction of the extension.
3. An HOA requested the following: "Redo the traffic impact study to show: Impact of an estimated 7.32 trips per unit or 5490 trips per day."
 - a. Why was ITE Code 221 (mid-rise multifamily apartments) selected for the TIA for trip generation instead of ITE Code 220 (low-rise multifamily apartments)? **Response:** ITE Code 221 was used as this is what the applicant stated they were proposing to build. The Wayne

Riddell Loop extension would have been a priority improvement regardless of which ITE code was used because it was identified in the Austin Strategic Mobility Plan (ASMP).

4. How were the background projects selected for their inclusion in the analysis? What are the implications of additional background traffic being added to the analysis? Response: Every effort is made to ensure that the projects anticipated to be built by the time the project is constructed are included as background projects. The Property Profile (online) tool is the primary tool we use to identify these projects. The main implications of including / excluding different background projects are impacts to a project's "pro-rata share", which is the share of identified improvements that a project is responsible for. Similar to the response to Question 3, the inclusion / exclusion of specific background projects would have no impact on the selection of the Wayne Riddell Loop extension as a priority improvement.
5. Can you please indicate the timing and phasing of potential improvements to the FM 1626 corridor? Response: There are several initiatives underway for FM 1626. In early 2019, the City of Austin completed a Preliminary Engineering Report (PER) to identify potential roadway and pedestrian improvements on FM 1626 between Manchaca Road and IH-35 frontage road. The PER for FM 1626 was funded with 2016 Mobility Bond dollars; however, no funding was allocated for design / construction.

Since the completion of the PER for FM 1626, TxDOT has identified safety funding to improve a section of FM 1626 between Sombrero Street to South 1st Street. The current estimated letting date is May 2022, putting start of construction around late Summer / early Fall 2022. It is estimated that construction for a project of this size would require nine months to 1.5 years. It is anticipated that this project will construct several recommendations from the PER described above.

Separately, TxDOT and Travis County have partnered to upgrade a separate segment of FM 1626 between Johnson Lane and Manchaca Road. Travis County provided the roadway design and right-of-way (ROW) for widening FM 1626 to include one additional travel lane in each direction, a continuous center turn lane, and sidewalk on the north side of the road. The project was then handed over to TxDOT to manage. TxDOT is currently working towards a July 2020 letting date and the most recent construction timeline indicates project completion in October 2021.

6. The report acknowledges that the South 1st Street bicycle lanes are used as parking for the school; why is the recommendation to prohibit that included in the TIA? Response: From a bicycle facility standpoint, every effort should be made to ensure that our existing and proposed bicycle facilities are used for the sole purpose of providing safe transportation options for cyclists. Allowing vehicles to park in the bike lanes is in direct opposition to that goal. From an access management perspective, vehicle queueing and student pick-up/drop-off should occur on-site. Furthermore, the protected bike lanes are identified in the ASMP as required bicycle improvements. For these reasons parking in the bike lane was prohibited in the TIA.
7. An HOA requested the following: "Complete the water quality studies prior to City Council consideration of this project."
Please briefly explain the water quality requirements that will be evaluated by City staff in connection with the site development permit. Response: During the site plan application review, water quality requirements will be required per LDC 25-8-211. Water quality controls will be required to treat all new and redeveloped impervious cover if the total exceeds 8,000 square feet. Based

on the type of water quality control proposed, specific requirements will be reviewed per Environmental Criteria Manual Section 1.6 (*Design Guidelines for Water Quality Controls*).

8. An HOA asked the following: "Ask that watershed protection division look at the impact of climate change on flooding projections prior to approval of this project."
 - a. Please respond. Response: The response provided below explains the source of the rainfall data used for the City's regulation of floodplains and storm drainage design, and the conservative nature of the design assumptions that the City requires. An explanation of the source of the City's rainfall data is also provided.

The City of Austin regulates development and bases floodplain studies on the best available rainfall data for the area. The current best available data is the National Oceanic and Atmospheric Administration's (NOAA) Atlas 14, Volume 11 for Texas. This rainfall atlas, which was published in September of 2018, incorporates data from all rain gauges in Texas with a sufficient length of record (based on statistical analysis criteria). This data was analyzed statistically to produce new "recurrence interval" rainfall amounts (our 100-year, 24-hour rainfall being one of these). This is the information that defines the "design" rainfall that is used to size storm drainage infrastructure. NOAA Atlas 14 volumes have been completed for a majority of the United States and this is the standard approach used throughout the country to develop design rainfall criteria and size storm drain infrastructure. The procedure looks back at the available rainfall data, which goes back as much as 100-years or more for some gauges, to estimate the design rainfall amounts.

As part of the development of NOAA Atlas 14 there has been research into methods to consider "non-stationary" climate (i.e. climate change). NOAA is working with several universities on this but as yet, they have not developed satisfactory statistical methods to consider non-stationary influences. NOAA Atlas 14 has resulted in a significant increase in the City's design rainfall amounts. For example, the 100-year, 24-hour rainfall is now 12.80 inches as opposed to the previous value of 10.20 inches. Additionally, the City's requirement that designs be based on fully developed conditions within the contributing watershed coupled with other higher regulatory standards means that our design requirements tend to result in conservatively large sizes for drainage infrastructure and for floodplain delineations.

The City's adopted Atlas 14-based floodplain regulations and drainage criteria are required for the Applicant's analysis and design of this development.

Andrew D. Rivera

Land Use Commissions Liaison
City of Austin - Planning & Zoning Department
P.O. Box 1088
Austin, Texas 78767
512-974-6508
www.austintexas.gov

Rhoades, Wendy

From: Rhoades, Wendy
Sent: Tuesday, May 19, 2020 10:50 AM
To: Aguirre, Ana - BC
Cc: Rivera, Andrew
Subject: AguirreQ05192020 B-01 Traffic, Flooding, Etc.

Commissioner Aguirre,
Please see our responses below.
Wendy

-----Original Message-----

From: Aguirre, Ana - BC <BC-Ana.Aguirre@austintexas.gov>
Sent: Monday, May 18, 2020 7:31 AM
To: Rivera, Andrew <Andrew.Rivera@austintexas.gov>; Rhoades, Wendy <Wendy.Rhoades@austintexas.gov>
Subject: AguirreQ05192020 B-01 Traffic, Flooding, Etc.

Good Morning Andrew and Wendy,

I have a few questions regarding this case.

1. What is the Akins HS Principal's response to the applicant's correspondence dated 5-13-2020?

RESPONSE: At this time, Staff has not received a response from the Akins HS Principal related to the Applicant's May 13th correspondence.

2. What are the assigned zones of the immediate surrounding areas of other AISD high schools?

RESPONSE: At McCallum HS located at 1301 W Koenig Lane, the school is zoned SF-3-NP and occupies its own block, but is adjacent to GR-MU-CO-NP to the north; P-NP (a City water plant), MF-3-NP, SF-6-NP and SF-3-NP to the east, SF-3-NP to the south, and MF-6-CO-NP and CS-MU-CO-NP to the west.

At Bowie High School located at 4013 W Slaughter Lane, the school is zoned I-RR and adjacent to GR-MU-CO to the north; I-RR zoned property to the east (a church), SF-2 and SF-2-CO zoned property to the south, and SF-2 to the west. At Crockett HS located at 5601 Menchaca Rd, the school is zoned SF-3-NP and is surrounded by GR-V-NP, GR-NP, LO-V-NP and LO-NP to the north, PUD-NP (condominiums) to the east, P-NP (a City park) to the south, and SF-2-NP and GR-NP to the west.

At LBJ HS located at 7309 Lazy Creek Drive, there is SF-3 and I-SF-4A to the north, SF-3 and SF-2 to the east, SF-3, SF-2-CO and GR-MU to the south, and SF-3 to the west.

3. There is an indication (Pg. 29 in backup) that the area where 60 ft. height would be allowed includes the flood plain area. Is that correct?

RESPONSE: The 60' height limit would be allowed by zoning, but not by the floodplain regulations which are more restrictive and therefore would take precedence at the time a site plan is submitted.

4. Previously, regarding other development projects, there have been concerns on the impact new development will have as it relates to adverse impact (flooding) downstream. How is the WPD engaged in the cumulative impact development projects have on Onion Creek flooding downstream? What feedback has WPD provided specific to this project?

RESPONSE: WPD Floodplain staff provided a response to this question and is provided in Part 1, page 25 of the backup.

Thank you for all you do! Ana

Ana Aguirre

Rhoades, Wendy

From: Rhoades, Wendy
Sent: Tuesday, May 19, 2020 4:40 PM
To: Denkler, Ann - BC
Cc: Mitchell, Amber; Good, Justin
Subject: FW: Riddell Tract
Attachments: South First Street Apartments TIA December 2019 Executive Summary.pdf

Ann,
Please see our combined responses below.

Can Transportation send me a copy of the TIA summary submitted by the applicant for this rezoning.
RESPONSE: Attached.

I'm trying to get an accurate estimate of the traffic that will be generated by the proposed development. Can staff explain the difference between the 3,661 trips and the 5,490 trips?

RESPONSE: The 5,490 trip number comes from using the incorrect code from the Trip Generation Manual to estimate trips for the site. This site is 3 to 5 stories in height, so the appropriate trip generation code is called Mid-Rise Multi-Family, which generates 3661 adjusted daily trips.

What are the most recent traffic counts on S. 1st, FM 1826 and Wayne Riddell?

RESPONSE: Rather than require 24-hour counts, we request that traffic counts be taken during the morning and afternoon "peak periods" only. The morning and afternoon peak periods coincide with what is commonly known as rush hour: 7-9am and 4-6pm. We base our traffic modeling around these periods as these are the times when the roadway network will experience the highest levels of traffic congestion. Unless a land use will experience a large number of vehicle trips outside these peak periods (such as a music venue), the morning and afternoon peak periods are the best times to analyze to get an accurate picture of how a development will affect the surrounding network."

And here is a pared down version of the peak period traffic counts collected with this TIA:

- FM 1626 / Wayne Riddell Loop
 - AM Peak Period
 - FM 1626: 1,013 vehicles
 - Wayne Riddell Loop: 134 vehicles
 - PM Peak Period
 - FM 1626: 1,461 vehicles
 - Wayne Riddell Loop: 215 vehicles
- FM 1626 / South 1st Street
 - AM Peak Period
 - FM 1626: 1,183 vehicles
 - South 1st Street: 1,116 vehicles
 - PM Peak Period
 - FM 1626: 1,544 vehicles
 - South 1st Street: 1,197 vehicles

These 24 hour counts are from the TxDOT Traffic Count Database System. They collect counts from a wide variety of sources and consolidate them in one place:

- South 1st Street: 9,700 vehicles per day based on data collected in 2015.
- FM 1626: 17,291 vehicles per day between Tunnel Trail and Circle Drive (based on 2018 counts) and 14,556 vehicles per day just west of IH-35 (based on 2018 counts).
- Wayne Riddell Loop: no traffic count data available

How much traffic is anticipated to utilize Wayne Riddell rather than South 1st?

RESPONSE: This was not analyzed in the TIA. It was determined that the more conservative approach to analyzing the study intersections in the future scenarios was to maintain the same traffic patterns that are currently observed.

Where are the signals currently on S 1st and FM-1826?

RESPONSE: For FM 1626 the only signal is at South 1st Street. For South 1st Street, there is the signal at FM 1626, a pedestrian hybrid beacon at Desert Primrose Drive, and a signal at Camperdown Elm Drive. There are additional signals north of Camperdown Elm Drive but they're pretty far from the project site.

Where are the current transit stops? Has Cap Metro indicated in writing they would create a stop to merit the 10% reduction in trip counts?

RESPONSE: The 10% reduction is actually a reduction for the use of transit and active modes strategies. The existing MetroBus 201 Southpark Meadows route has two stops along the east side of South 1st Street. S 1st Street provides good connectivity from a pedestrian and bicyclist standpoint to Slaughter Lane, and the applicant will be paying fee in lieu to complete the sidewalk network on the west side of S 1st Street and will also be upgrading the bike lane along S 1st Street to a protected facility with delineators.

Please provide TXDOT's written comments on the proposed project.

RESPONSE: It was submitted to both County and TxDOT and neither jurisdiction provided feedback.

Is legal going to be attending the meeting?

RESPONSE: Yes, the Law Department will be on the phone line.

I realize drainage and environmental issues are done at time of site plan. However, can the drainage and/or environmental staff tell me if they're likely to be required to build ponds on site or they can contribute to a regional pond?

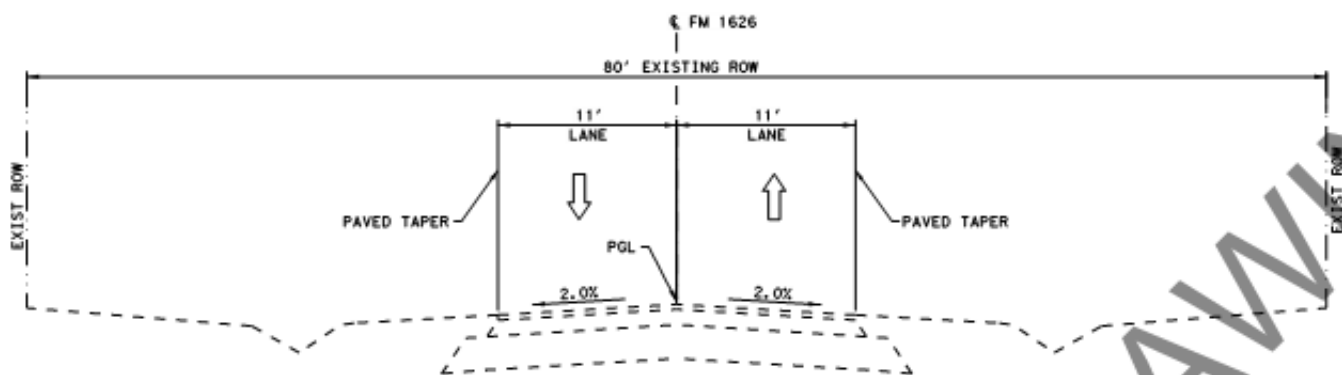
RESPONSE: Pending.

Is the 60' setback adequate distance from the pipeline. (Re the section in the subdivision code?)

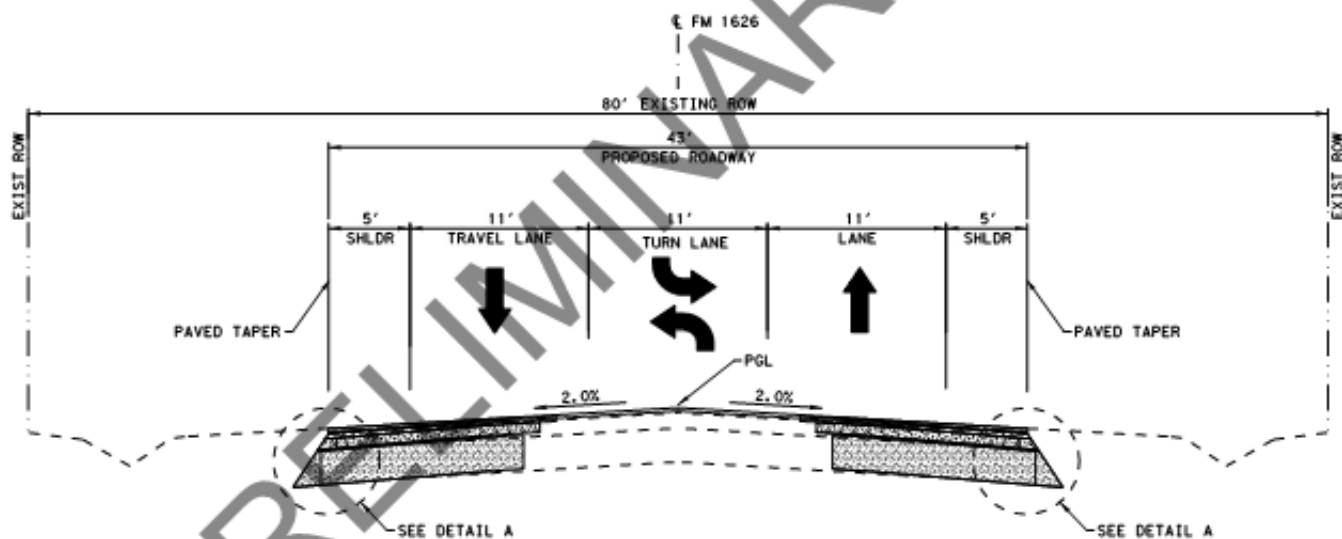
RESPONSE: FYI, the pipeline along western boundary is dormant abandoned 6" pipeline, so no LDC provisions apply to require a buffer etc. <https://www.austintexas.gov/department/development-near-hazardous-liquids-pipelines>

Additionally, AFD did not find any hazardous materials pipelines per the ordinance.

Ann Denkler
Boards and Commissions



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

Project Summary

Extents: South 1st Street to Sombrero Drive

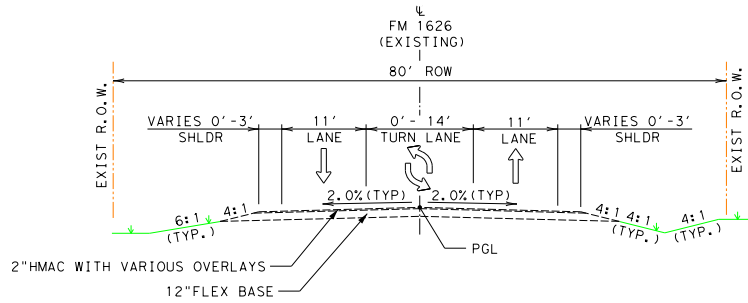
Length: 0.75 miles

Responsible Party: TxDOT

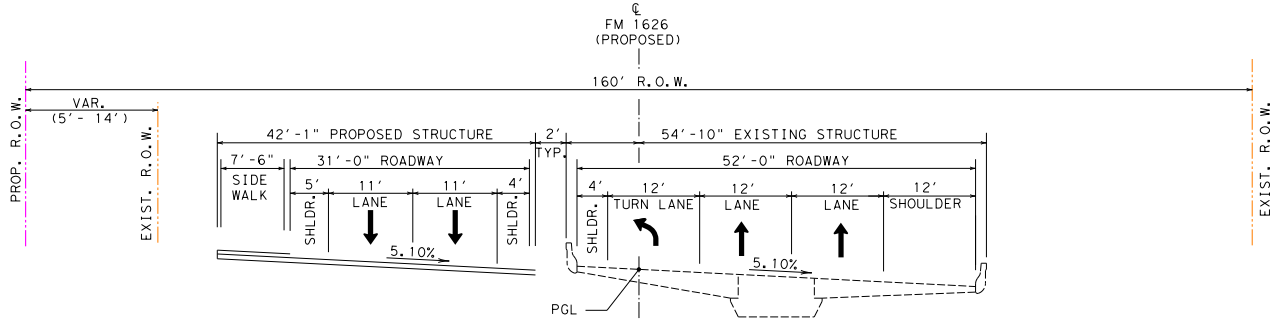
Project: Widens from two lanes to three lanes with a 5-foot shoulder on both sides.

Timeline: Construction Planned for sometime in 2022

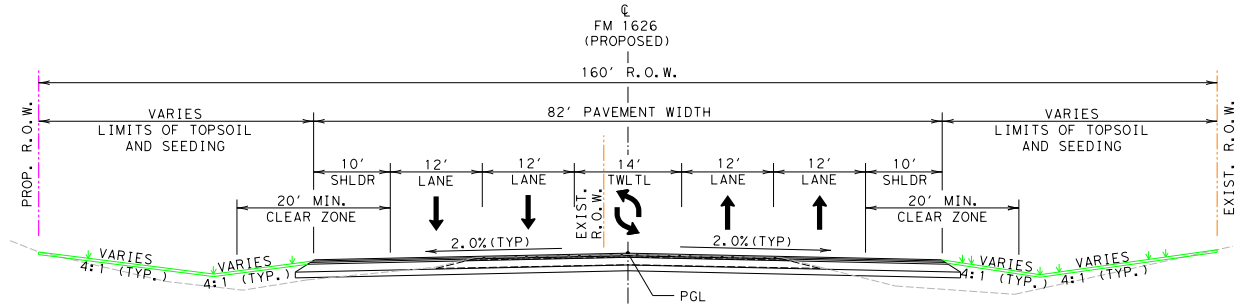
Cost: \$1,163,674



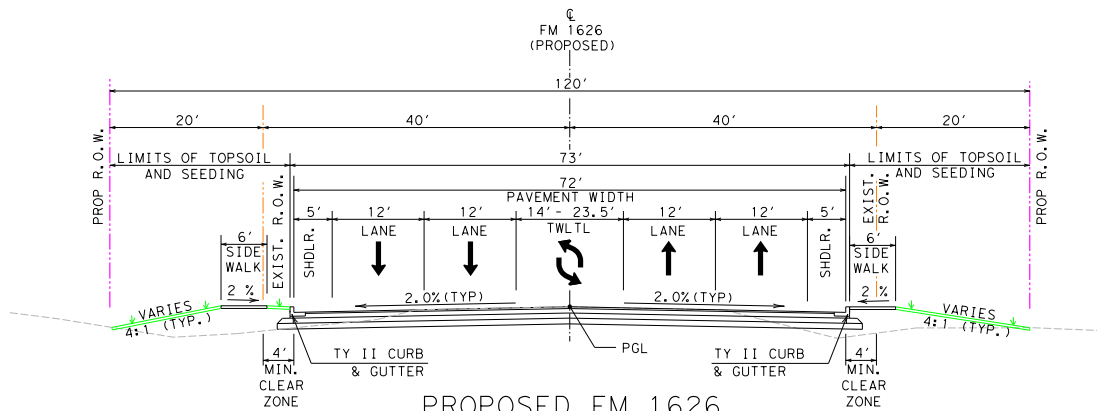
EXISTING FM 1626
BRODIE LANE TO FM 2304 (MANCHACA RD)



PROPOSED FM 1626
BEAR CREEK BRIDGE



PROPOSED FM 1626
PROPOSED TRANSITION AREA
JOHNSON LANE TO BRODIE LANE



PROPOSED FM 1626
BRODIE LANE TO FM 2304 (MANCHACA RD)

Project Summary

Extents: Brodie Lane to Manchaca Road

Length: 1.33 miles

Responsible Party: TxDOT

Project: Widens from three lanes with no shoulder, curb and gutter, or sidewalks to five lanes with shoulder, curb and gutter, and sidewalks

Timeline: Begin construction in July 2020 and be completed by fall of 2021

Cost: \$11,352,514



September 26, 2019

Ms. Denise Lucas, Director
Planning and Zoning Department
City of Austin
505 Barton Springs Road, 5th Floor
Austin, Texas 78704

Via Hand Delivery

Re: Riddell Tract Multifamily Development - Rezoning Application for 37.4 acres located at 10801
Wayne Riddell Loop, Austin, Texas ("Property")

Dear Ms. Lucas:

We respectfully submit the enclosed rezoning application for Riddell Tract multifamily development as representatives of the owners of the above stated Property. The proposed project is comprised of 750 residential multifamily units, and associated parking.

The current zoning of the Property is I-RR, and we are requesting MF-4 zoning for the entire Property. The Property is not located within a Neighborhood Plan. Surrounding zoning includes MF-3-CO, MF-2-CO, SF-2, and SF-1. Surrounding uses include apartments, commercial, public high school, public parkland, and single-family residential. Development of the Property involves considerable site constraints, including heritage trees, parkland dedication, and compatibility setbacks due to adjacent single-family residences. Therefore, the application proposes to rezone the Property to MF-4 zoning designation primarily to provide for flexibility in the height of buildings as authorized pursuant to MF-4 zoning.

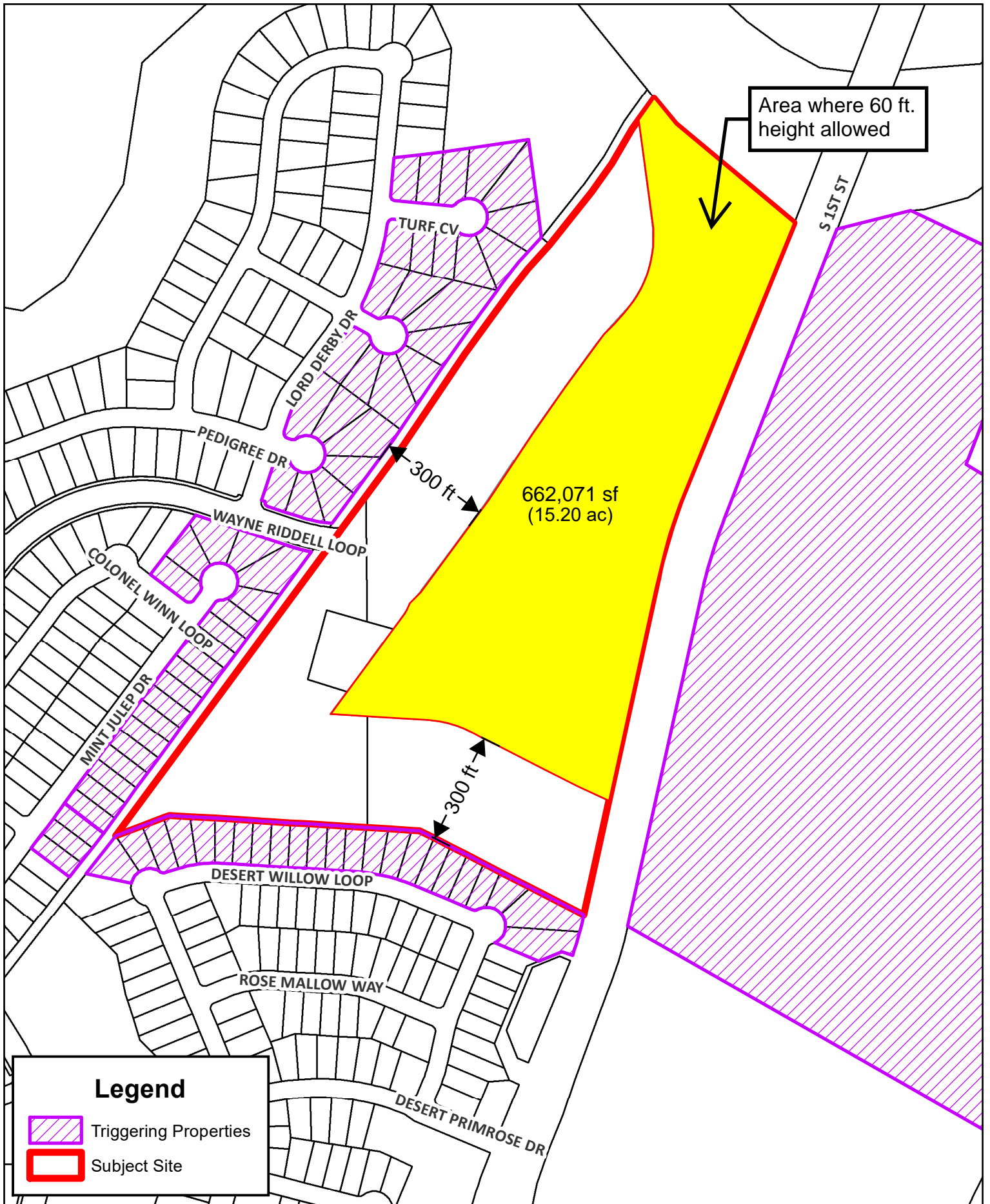
If you have any questions about the rezoning application or need additional information, please do not hesitate to contact me at your convenience. Thank you for your time and attention to this project.

Very truly yours,

David Hartman

cc: Wendy Rhoades, Planning and Zoning Department, via hand delivery
Ben Browder, Oden Hughes, via electronic email

[Applicant's Summary Letter](#)



March 2, 2020

Wendy Rhoades

City of Austin

Planning & Development

505 Barton Springs Road, #175

Austin, Texas 78704

(512) 974.7719

Wendy.Rhoades@austintexas.gov

Proposed Development & Re-Zoning of Wayne Riddell Loop

Ref. 10801 Wayne Riddell Loop: C14-201-0129

Dear Ms. Rhoades,

The following is in response to the proposed re-zoning case initiated by David Hartman on behalf of Oden Hughes, LLC for the property located at 10801 Wayne Riddell Loop in Austin, Texas. As we understand it, the current property is zoned I-RR. The applicant is seeking MF-4 zoning for the entire property in order to proceed with a future phased build-out of the entire property to include a 750-unit apartment complex, community access jogging trail, dedicated parkland, and an extension of the Wayne Riddell corridor.

Our community, the Meadows at Double Creek, is located directly South of the proposed development and will be heavily impacted by the approval of this project. We, the board and community of the Meadows at Double Creek, support the proposed re-zoning and future development of the subject property.

We have been working with David Hartman, Ben Browder, and other key members of the Oden Hughes Development team since October to understand the many facets of this proposed development including aesthetics, function, and market demand. A key factor of these conversations has been focused on the solutions the development team will provide for areas of concern within the adjacent neighborhood communities of South Austin.

The team has addressed all of our concerns in regard to proximity and placement of buildings along the Southern and Western property lines, drainage and water detention, retention of green space, traffic congestion, increased mobility, safety, as well as making an effort to propose a development that will both honor the residential feel of our existing community as well as provide additional community benefits to the area. We have included a list of pledged site upgrades to be incorporated with the approval of this project for review from Oden Hughes.

One issue that remains open is the extension of the Wayne Riddell Corridor. As we understand it, the development team has offered two solutions for extension from South 1st street to be reviewed and ultimately approved by City Council. We would like to recommend that if the proposed re-zoning case be approved, it is done so with the corridor extension from South 1st street to the existing Wayne Riddell Loop intact. As traffic is a key concern for all the neighboring residents, we feel strongly that this road extension will reduce the existing cut-through traffic concerns through our own neighborhood as well as ease the congestion at the South First and 1626 intersection. This extension would also help decrease congestion at the entry and exit points to Akins High School during peak hours and provide additional safety measures for the many students that currently cross South 1st to and from school.

We believe the proposed development will be a good addition to our community and the addition of a corridor extension that helps resolve crucial area concerns, will provide further growth and enjoyment of our South Austin community.

Please feel free to contact our president, Susan Kirkpatrick, at the information below if you have any additional questions.

Sincerely,

The Meadows at Double Creek POA


Harmony Clarkrider, Vice-President

Meadows at Double Creek Contact information:

Susan Kirkpatrick, President

sckirkp@att.net

Attachment: Proposed Development Standards for Meadows at Double Creek from Oden Hughes

Proposed Development Standards

02/06/2020

1.) Zoning Development Standards

- a. MF-4 CO zoning requested (maximum building height = 60'-0")
- b. MF-3 development standards to be applied for all other zoning development standards on property (except for maximum building height)
 - i. 55% building coverage maximum
 - ii. 65% impervious coverage maximum
 - iii. Minimum site area requirements
 - iv. Minimum yard setbacks (see below)
 - v. 0.75: 1 FAR
- c. 750 dwelling unit maximum

2.) Buffering

- a. New LDC revision compatibility requires 20' building setback, and building height can achieve maximum height at 100' from property line
- b. Current code compatibility requires minimum 25' building setback for maximum 30' height or 2 stories, and 50' building setback for maximum 40' height or 3 stories
- c. Proposed compatibility buffering
 - i. South Property line
 - 1. Minimum 70' wide dwelling unit setback
 - 2. Vegetative buffer (maintain existing tree cover at South Property line in accordance with jogging trail installation)
- d. Privacy perimeter fence for proposed development (minimum 6' high- wrought iron/ steel)

3.) Other items

- a. Proposed extension & completion of sidewalk access along S. 1st street frontage to connect to existing sidewalk at Meadows at Double Creek
- b. Proposed buffered bike lanes for full frontage of Akins high school with delineated posts on S. 1st street frontage
- c. Security lighting along jogging path to be coordinated with PARD staff to ensure lighting does not impact adjacent neighbors along South property line. Suggested lighting such as nightwatchmen lights at ROW entrances and bollard/low lighting along the entirety of community trail.
- d. On site security measures to include:
 - i. Perimeter security fencing
 - ii. Secure access gates with fob access for all residents with 1-point logged delivery drop-off/pick up.
 - iii. HD camera with license plate readers
 - iv. 1-2 staff members living on site
 - v. Security cameras around property
 - vi. Security lighting around property

Rhoades, Wendy

From: MIKHAIL KOZYRENKO [REDACTED]
Sent: Monday, May 11, 2020 7:59 PM
To: Rhoades, Wendy
Subject: Proposed Development and re-zoning of Wayne Riddell Loop

Follow Up Flag: Follow up
Flag Status: Flagged

*** External Email - Exercise Caution ***

I'm supporting this proposal of re-zoning.

MikhailKozyrenko
11120 Desert Willow Loop
Austin TX 78748

CAUTION: This email was received at the City of Austin, from an EXTERNAL source. Please use caution when clicking links or opening attachments. If you believe this to be a malicious and/or phishing email, please forward this email to CSIRT@austintexas.gov.

Rhoades, Wendy

From: Jeanne Devine [REDACTED]
Sent: Thursday, May 14, 2020 9:50 PM
To: Rhoades, Wendy
Subject: Case Number: C14-2019-0129

Follow Up Flag: Follow up
Flag Status: Flagged

*** External Email - Exercise Caution ***

Public Hearing: May 19, 2020, Zoning and Platting Commission
Contact: Wendy Rhoades

I am in favor of this zoning request. I am a resident of Meadows at Double Creek.

Jeanne Devine
10809 Desert Willow Loop (my address affected by this application)
Austin, TX 78748
512-761-4977

CAUTION: This email was received at the City of Austin, from an EXTERNAL source. Please use caution when clicking links or opening attachments. If you believe this to be a malicious and/or phishing email, please forward this email to CSIRT@austintexas.gov.

Rhoades, Wendy

From: Andy Jean [REDACTED]
Sent: Friday, May 22, 2020 10:48 PM
To: Rhoades, Wendy
Subject: C14-201-0129

*** External Email - Exercise Caution ***

Sending an email in support of Meadows at Double Creek proposition

CAUTION: This email was received at the City of Austin, from an EXTERNAL source. Please use caution when clicking links or opening attachments. If you believe this to be a malicious and/or phishing email, please forward this email to CSIRT@austintexas.gov.

Proposed Development Standards – Riddell Tract (C14-2019-0082)**1. Zoning Development Standards. See Exhibit A.**

- a. Within 100' of west and south property line: MF-2 zoning, and maximum 2 stories.
- b. Remainder of property:
 - i. MF-4-CO zoning (for maximum 48' height per ZAP recommendation).
 - ii. MF-3 zoning for all other zoning development standards (except for height).
 - iii. Any 4 story structures must be located within 400' of S. 1st Street.
- c. 750 dwelling units maximum.
- d. Impervious cover limited to maximum 55% of gross site area (total site is 37.403 acres).

2. Area Infrastructure.

- a. Signalize intersection of Wayne Riddell Loop/Akins High School Access/South 1st Street, and extend Wayne Riddell Loop.
- b. Install traffic calming devices along existing Wayne Riddell Loop, as agreed to by ATD. See Exhibit B Agreed Menu of Offsite Traffic Calming Options for Existing Wayne Riddell Loop
- c. Extend sidewalks from S. 1st Street to connect to existing Wayne Riddell Loop.
- d. Extend sidewalks along west side of S. 1st Street to connect to existing sidewalk at Meadows at Double Creek.
- e. Convert buffered bicycle lanes to protected bicycle lanes for Akins High School with delineated posts on S. 1st Street frontage.
- f. Implement Transportation Demand Management.
 - i. Project is enabling neighborhood walkability through pedestrian connection from Wayne Riddell Loop to South 1st Street, additional off-site sidewalk on South 1st Street, and new traffic signal to provide for safer crossings to/from Akins High School and the lone Capital Metro transit stop in the area.
 - ii. Project is creating buffered/protected bicycle lanes on Wayne Riddell Loop and improving existing buffered bicycle lanes on South 1st Street (which currently experiences parked vehicles throughout the day) to protected bicycle lanes.
 - iii. Applicant will have a Capital Metro coordinator on-site who will provide Capital Metro routes and stop information to prospective and new tenants.
 - iv. Applicant has discussed providing a partial/full subsidy for Capital Metro fares/passes to one person in up to 10 percent of units based on interest of tenants.
 - v. TDM reduction in the TIA – 10% reduction of average daily trips. Committed TDM measures 18%.

3. Buffering/compatibility.

- a. Proposed compatibility buffering.
 - i. South property line: Minimum 70' wide dwelling unit setback.
 - ii. West property line: Minimum 50' wide dwelling unit setback.
 - 1. Knolls HOA owns a 30' wide abandoned pipeline easement area between the Riddell tract and the back of adjacent residential lots/fences. This creates an additional 30' buffer from the Riddell tract property line to the west.
- b. Summary of current and proposed LDC compatibility requirements.
 - i. Current LDC compatibility provisions requires minimum 25' building setback for maximum 30' height or 2 stories and 50' building setback for maximum 40' height or 3 stories. Playground, sport courts are prohibited within 50' of single family residences.
 - ii. Proposed LDC Revision compatibility provisions requires 20' building setback, and building height can achieve maximum height at 100' from property line. Playground and sport courts are allowed uses adjacent to single family residences.
- c. 6' high privacy perimeter fence along west and south property line (wrought iron/steel fencing materials along south property line).
- d. Provide maximum 170' long metal fence (with gate) between pool and playground areas at Wayne Riddell Loop.
- e. Dark Skies: Property will be developed in accordance with dark skies requirements of Commercial Design Standards/Subchapter E, Section 2.5 (Exterior Lighting).
- f. Other Current LDC Compatibility requirements:
 - i. All exterior lighting will be hooded or shielded from adjacent residential property.
 - ii. No parking or driveways are allowed within 25' of the property line to the west and south.

4. Environmental/Parkland.

- a. Provide green stormwater infrastructure (GSI) for required water quality treatment per ECM 1.6.7, which includes porous pavement as an option, along with biofiltration, rainwater harvesting, and rain gardens, among other options.
- b. On-site detention will be evaluated as part of the RSMP participation study. Two downstream analysis points will be used for the RSMP participation study: (i) Slaughter Creek just downstream of the property, and (ii) at the confluence of Slaughter and Onion Creek. If the analysis shows that RSMP participation is the best option for the watershed and therefore detention is not required, then an additional 10% of the required water quality volume will be captured and treated. If RSMP participation is not the best option, then on-site detention will be provided and proposed discharges from the site will be reduced by at least 10% of existing discharges.
- c. Design, build and install at developers expense a system of fences and gates that locks and secures access to Knolls private greenbelt from the Riddell tract.
- d. Security lighting along jogging path to be coordinated with PARD staff to ensure lighting does not impact adjacent neighbors along south and west property line.
 - i. Incorporate lighting such as nightwatchmen lights at ROW entrances, and bollard/low lighting along the entirety of the recreational trail.

5. On Site Security Measures.

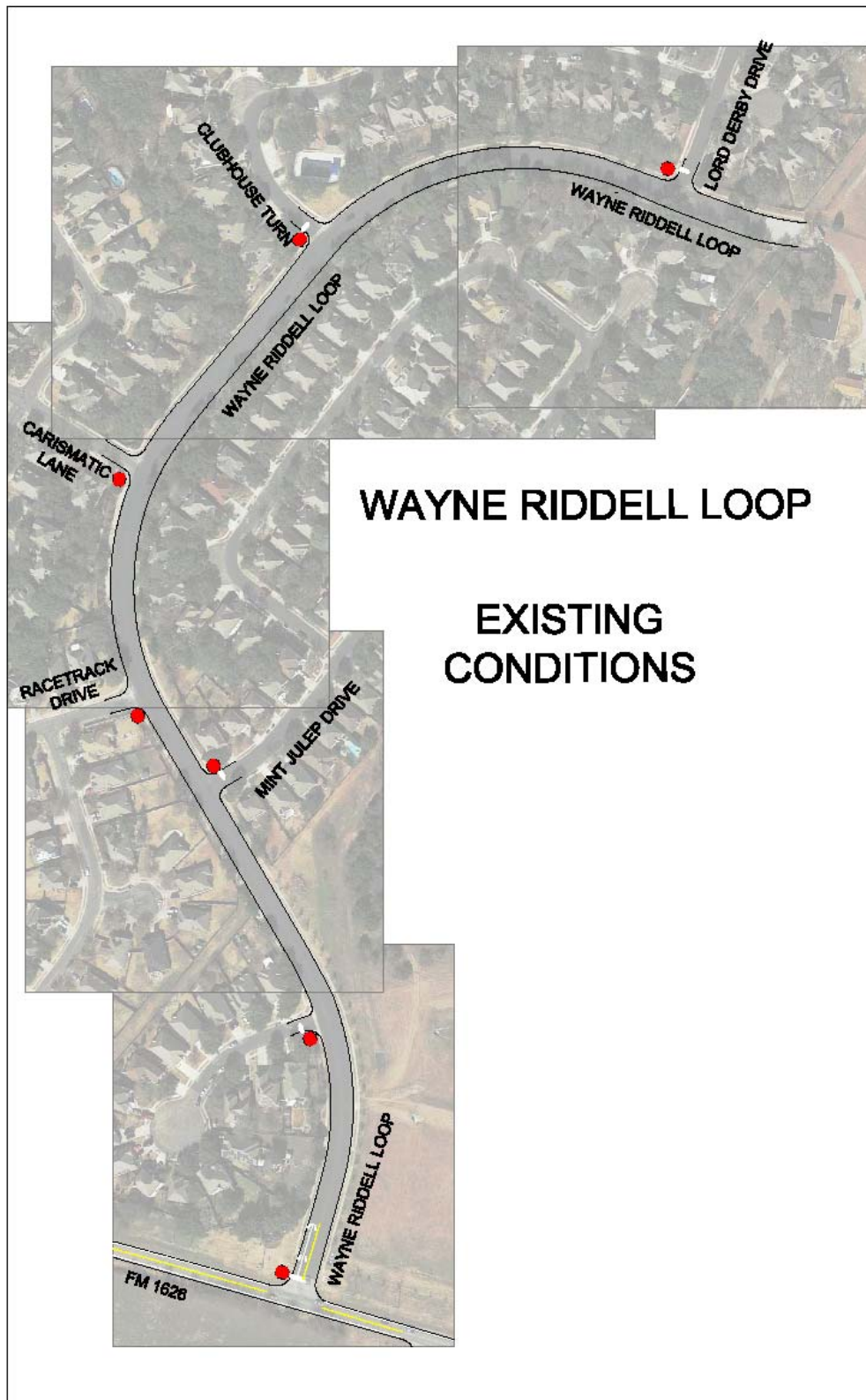
- a. Perimeter security fencing.
- b. Secure access gates with fob access for all residents with 1-point logged delivery drop-off/pick-up.
- c. HD camera with license plate readers.
- d. 1-2 staff members living on site.
- e. Security cameras and lighting on property.

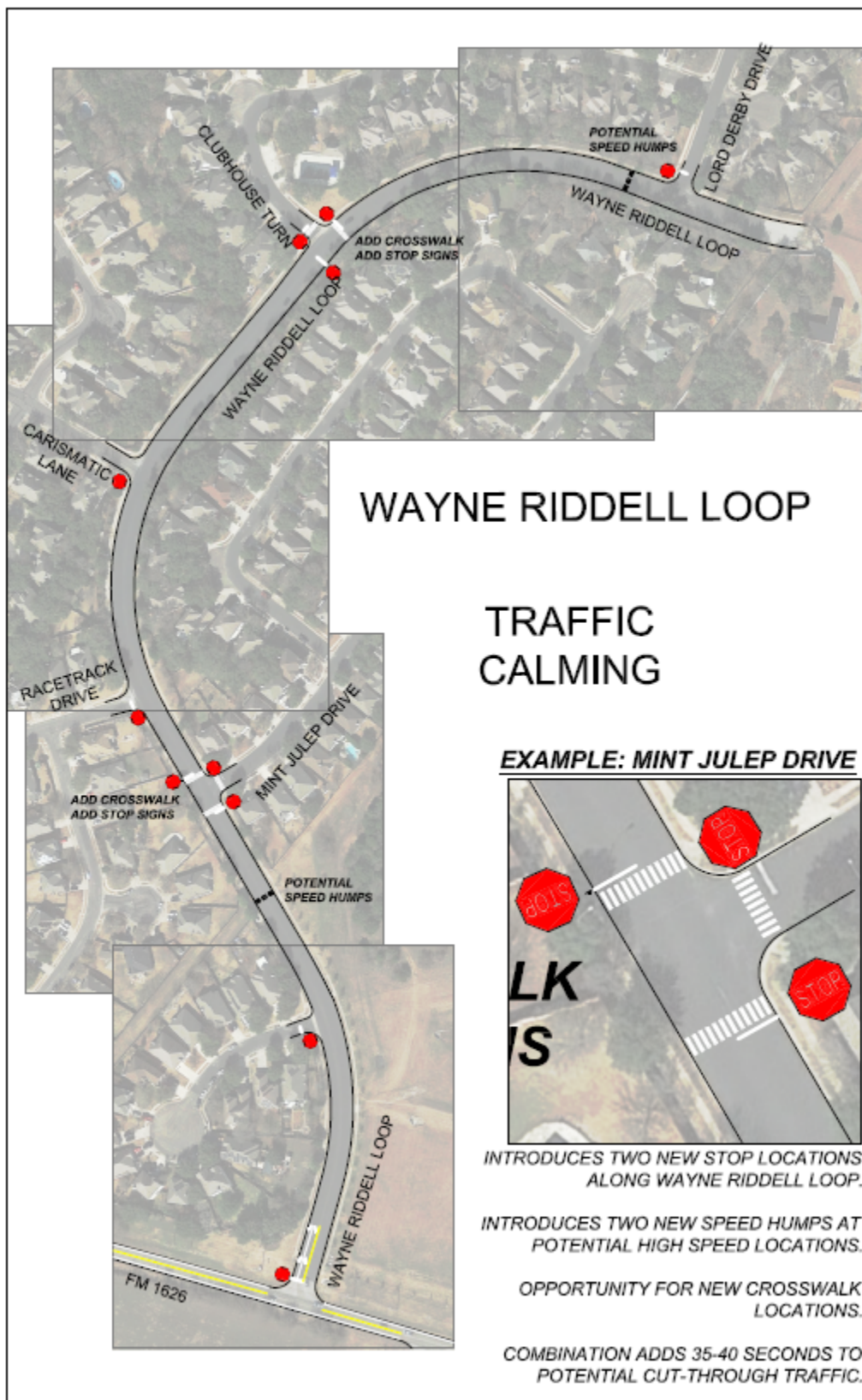


EXHIBIT B

Agreed Menu of Offsite Traffic Calming Options for Existing Wayne Riddell Loop

Item	Name	Description	Traffic Calming Options – Existing Wayne Model User	Cost Range	Example
1	Bicycle Lanes	<p>Also called bike conversion or an undivided roadway to a cross section with two or more lanes through one-way vehicle travel lanes. The most common application is the conversion of an undivided four-lane roadway to a three-lane roadway consisting of two through lanes and a center two-way left turn lane. The reduction in a number of lanes permits the installation of facilities for other uses, such as bicycle lanes, sidewalks, pedestrian refuge islands, transit uses, and on-street parking.</p> <p>A speed cushion consists of two or more raised or flat islands laterally across a roadway. The height and length of the raised areas are comparable to the dimensions of a speed hump. The primary difference is that a speed cushion has gaps (often referred to as "bumps") between the island and a wide travel lane, while a hump has a large emergency vehicle, some trucks, cannot be used and bicyclists to go through the feature without any vertical definition.</p> <p>A choker is the narrowing of a roadway through the use of curb extensions or raised islands. It can be considered a pair of curb extensions at a midblock location that run over the travel lane by widening the islands or placing a stop at that location. A choker can also be created through the use of raised islands. This narrowing is intended to discourage high-speed travel and to reduce the use of vehicle lanes.</p>	<p>Can be accomplished after construction close sections of traffic operating on a new road/our road road.</p>	\$50,000	<p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p> <p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p>
2	Speed Calming	<p>The height and length of the raised areas are comparable to the dimensions of a speed hump. The primary difference is that a speed cushion has gaps (often referred to as "bumps") between the island and a wide travel lane, while a hump has a large emergency vehicle, some trucks, cannot be used and bicyclists to go through the feature without any vertical definition.</p> <p>A choker is the narrowing of a roadway through the use of curb extensions or raised islands. It can be considered a pair of curb extensions at a midblock location that run over the travel lane by widening the islands or placing a stop at that location. A choker can also be created through the use of raised islands. This narrowing is intended to discourage high-speed travel and to reduce the use of vehicle lanes.</p>	<p>Can be accomplished after construction close sections of traffic operating on a new road/our road road.</p>	\$5,000 per set	<p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p> <p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p>
3	Speeddowns / Choker Islands	<p>A choker is the narrowing of a roadway through the use of curb extensions or raised islands. It can be considered a pair of curb extensions at a midblock location that run over the travel lane by widening the islands or placing a stop at that location. A choker can also be created through the use of raised islands. This narrowing is intended to discourage high-speed travel and to reduce the use of vehicle lanes.</p>	<p>Can be accomplished after construction close sections of traffic operating on a new road/our road road.</p>	\$20,000	<p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p> <p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p>
4	Median Island	<p>A median island narrowing is a raised island located along the street center line that narrows the travel lanes at that location. The visual appearance of median islands varies from a raised island to a low island. A median island is typically a raised island and serves a different purpose as a standard median on a 4- or more-lane roadway. The latter provides a physical barrier between opposing traffic flows, an important safety feature for a four-lane or more roadway. A median island is a raised island that narrows the travel lanes at a location on a roadway corridor, and a place of refuge for a vehicle in a crash. A median island is a raised island that narrows the travel lanes at a location on a roadway corridor, and a place of refuge for a vehicle in a crash.</p>	<p>Can be accomplished after construction close sections of traffic operating on a new road/our road road.</p>	\$20,000	<p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p> <p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p>
5	Lateral Shift	<p>Lateral shift is a realignment of an overhead or straight street that causes travel lanes to shift to one direction. The primary purpose of a lateral shift is to reduce the travel lane width along the street. A typical lateral shift separates opposing traffic through the use of a raised island. Without the island, a road could not be a center line road in order to allow the travel lanes to shift. A lateral shift is a realignment of a roadway that shifts the travel lanes of a roadway to one direction. A lateral shift is a realignment of a roadway that shifts the travel lanes of a roadway to one direction. A lateral shift is a realignment of a roadway that shifts the travel lanes of a roadway to one direction.</p>	<p>Needs to be included in design of new road.</p>	Striping 250,000	<p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p> <p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p>
6	Solar Powered Speed Sign	<p>A solar powered speed sign is a sign that is powered by solar energy. A solar powered speed sign is a sign that is powered by solar energy. A solar powered speed sign is a sign that is powered by solar energy. A solar powered speed sign is a sign that is powered by solar energy. A solar powered speed sign is a sign that is powered by solar energy.</p>	<p>Can be accomplished after construction close sections of traffic operating on a new road/our road road.</p>	\$4,000	<p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p> <p>http://www.bikefriendly.com/bikefriendly/ebike.htm</p>







May 13, 2020

Ms. Tina Salazar
Principal, Akins High School
10701 South 1st Street
Austin, Texas 78748
(512) 841-9905
tina.salazar@austinisd.org

RE: Akins High School Observations and Potential Improvements

Dear Ms. Salazar,

WGI has reviewed the traffic operations around and within the Akins High School in Austin, Texas adjacent to the proposed South 1st Street Apartments development (**Attachment 1**). The purpose of this memorandum is to provide an assessment of existing conditions and issues, as well as to provide potential solutions regarding traffic operations and improvements for students and staff of the school while coinciding with the potential improvements proposed with the construction of the South 1st Street Apartments and required by the Austin Transportation Department (ATD).

OBSERVATIONS

One day of observations was conducted Thursday, March 12 from 8:30 AM to 9:30 AM and 4:00 to 5:00 PM local time. South 1st Street and the parent drop-off/pick-up loop were areas of focus to determine existing operations and problem areas. A summary of the observed existing operations of Akins High School during drop-off and pick-up times can be found in **Attachment 2**.

All images referenced in the below section about observations can be found in **Attachment 3**.

WGI staff spent a significant portion of time during the morning observation period analyzing operations along South 1st Street and the west side of the high school as the official drop-off loop is situated on the south end of the high school along South 1st Street.

MORNING DROP-OFF/ARRIVALS

From 8:00 AM to 8:45 AM, the drop-off loop was serving one to four cars at a time and operating smoothly (**Image 1**). Some patrons were parking in the visitor spots within the drop-off loop instead of utilizing the loop to drop-off the students. Students driving themselves were mostly entering via South 1st Street and parking in the lot on the west side of the building.

Beginning just before 8:50 AM, an increase in demand for the drop-off loop occurred. At approximately 8:50 AM, vehicles began to spill out onto South 1st Street at the entrance of the drop-off loop. Vehicles from Old San Antonio Road cut through the parking lots south of the building to bypass the drop-off queue and create additional congestion at the drop-off loop. Vehicles continued to alter the intended flow of the drop-off loop and cut through the parking lot to the north and exit via other South 1st Street access points.



At 8:55 AM, approximately 13 vehicles were waiting to exit the drop-off loop to South 1st Street. The Pedestrian Hybrid Beacon (PHB) south of the school at Desert Primrose Drive occasionally gave vehicles egressing on South 1st Street gaps in traffic (**Image 2**) to make their intended movement.

Operations and queues begin to subside at 9:00 AM and are all contained within on-site facilities. Throughout the morning observation period, no drop-offs were observed directly on South 1st Street.

AFTERNOON PICK-UP/DEPARTURES

Upon arrival to the high school at 4:00 PM (30 minutes before the dismissal period), there were vehicles parking in the protected bike lane along South 1st Street and the pick-up loop was filled to capacity (**Image 3**).

As 4:30 PM approached, any available gap on South 1st Street was filled by a vehicle waiting to pick-up (**Image 4**), extending from several hundred feet north and south of the access driveways. As drivers became desperate for a parking space, some would wait on the inside travel lane on South 1st Street just south of the pick-up loop access or pile into the access driveway itself (**Image 5**).

Once the bell rings at 4:30 PM for dismissal, students quickly begin to disperse to the vehicles in the parking lot, pick-up loop or begin to walk over to South 1st Street to find their vehicle. With the countless vehicles parked along South 1st Street, the dangerous egressing movements from the school's access driveways began as vehicles leaving the school have very limited sight distance. Vehicles on South 1st Street began to slow down as they entered the area near the school as they know that there are vehicles abruptly pulling out into flowing traffic. Another dangerous behavior that was observed several times was a vehicle stopping in the outside travel lane on South 1st Street to let a person quickly jump in the car (**Image 6**).

At 4:45 PM, the congestion surrounding the school in the pick-up loop, parking lot, and on South 1st Street has significantly subsided. Some vehicles still remain on South 1st Street as they wait for their student to exit the building, but they are very sparse. The queues of the pick-up loop are contained within the site at this time. This indicates that though there is more than 50 minutes of queuing and congestion, less than 15 minutes of it is associated with the actual pick-up of students. The remainder is associated with vehicles arriving before there are any students to pick-up.



POTENTIAL IMPROVEMENTS

AKINS HIGH SCHOOL IMPROVEMENTS

WGI has identified three sets of improvements to better contain Akins High School traffic on-site. All of these improvements would coincide with the approved off-site improvements related to the multi-family development adjacent to the high school, which are:

- A traffic signal at South 1st Street and the central school access driveway
 - Wayne Riddell Loop will be extended to South 1st Street and this will become a four-legged intersection
- Converting the protected bike lanes on South 1st Street to buffered bike lanes
 - Plastic vertical delineators will be installed in the two-foot-wide buffer to create additional protection for cyclists
 - This will prevent vehicles from parking in the bike lanes while waiting for afternoon dismissal

Again, these improvements were previously identified by ATD as part of the Austin Strategic Mobility Plan and are the responsibility of the development applicant to implement as a condition of approval for the development (or any development on the property).

The potential improvements in **Attachment 4** are as follows:

- Change existing flow of drop-off/pick-up circulation
 - Close southern/main driveway that connects directly to the drop-off/pick-up loop
 - Vehicles can enter and exit from the South 1st Street / Wayne Riddell Loop / Akins High School Central Access intersection where the new traffic signal will be installed
- Temporarily close access connecting to drop-off/pick-up loop to remove additional flow of vehicles at the loop
 - Setting out and removing three standard traffic cones for both the drop-off and pick-up period would suffice
- Close several accesses to the drive isle to create queue space for vehicles utilizing the new signal at South 1st Street / Wayne Riddell Loop / Akins High School Central Access
 - Closing access points to the drive isle in the parking lot south of the central driveway will create additional queueing space internal to the site
 - This will also lower the amount of conflict points within the parking lot

OLD SAN ANTONIO ROAD IMPROVEMENTS

Separate from the improvements provided by the multi-family project, the City of Austin has plans to improve Old San Antonio Road. The east-west section of Old San Antonio Road just south of Southpark Meadows is a low water crossing and is very dangerous when flooded. The City of Austin had originally proposed permanently closing the road; however, based on public feedback, they are proposing that the



road remain open until a traffic light has been installed at FM 1626 and Old San Antonio Road. For the time-being, cul-de-sacs will be constructed on either side of the flood area to make turning around easier when the road is flooded. Permanent gates on either side of the flood area will also be installed to provide a more effective barricade during floods than the current system of using portable barricades. The gates will remain open during normal conditions. The City of Austin is ultimately making the recommendation to eventually close the road based on cost, constructability, and effectiveness.

NEXT STEPS

Should Akins High School decide to go forth with any of the recommended mitigations, WGI would be happy to aid Akins High School through a municipal process or offer any planning/construction services to take these ideas from concept to design and implementation. Currently, the afternoon pick-up situation presents issues within the public right-of-way that would be the school's responsibility to improve. If you have any questions, comments, or concerns regarding the analysis or recommendations, please contact me at (512) 669-5560 or madeleine.hirsch@WGInc.com / dan.hennessey@WGInc.com.

Sincerely,

WGI

A handwritten signature in black ink, appearing to read 'M. Hirsch'.

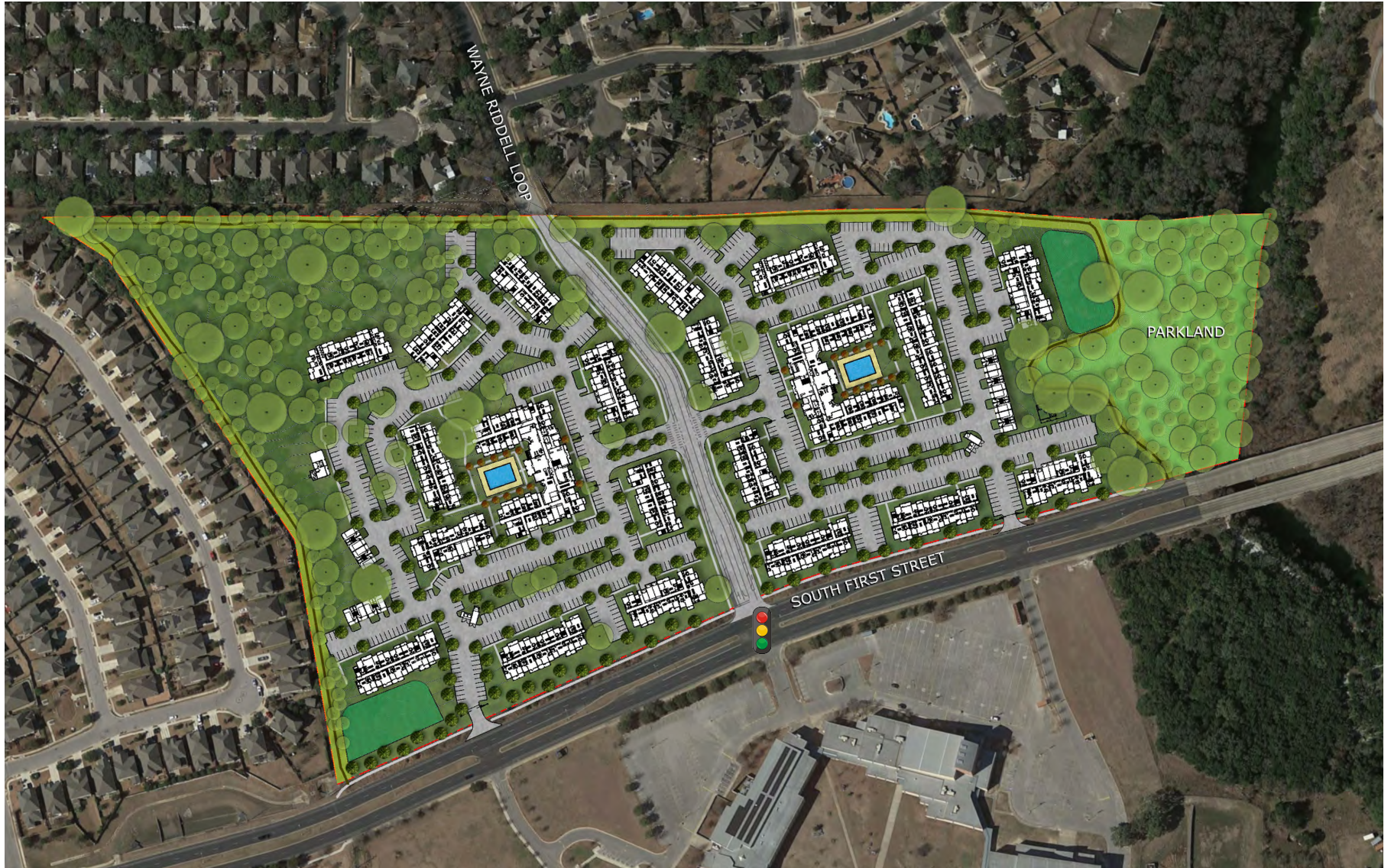
Madeleine Hirsch, E.I.T.
Graduate Engineer, Mobility

A handwritten signature in black ink, appearing to read 'D. Hennessey'.

Dan Hennessey, P.E., PTOE
Director, Mobility

Attachments

- Attachment 1 – South 1st Street Apartments Site Plan
- Attachment 2 – Existing Conditions
- Attachment 3 – Observation Photos
- Attachment 4 – Akins High School Potential Improvements



Key:

- = Drop-Off/Pick-Up Loop (In)
- = Drop-Off/Pick-Up Loop (Out)
- = Short-Cut to Drop-Off/Pick-Up Loop
- = Short-Cut from Drop-Off/Pick-Up Loop
- = Queue for Pick-Up

Left turns out of the driveways are allowed, but observed mostly right turns out due to high volume of South 1st Street traffic

Vehicles park in buffered bike lane on South 1st Street due to lack of capacity in pick-up loop and traffic volumes on South 1st Street

Additional flow creates congestion near drop-off/pick-up zone

Official Pick-Up and Drop-Off Loop

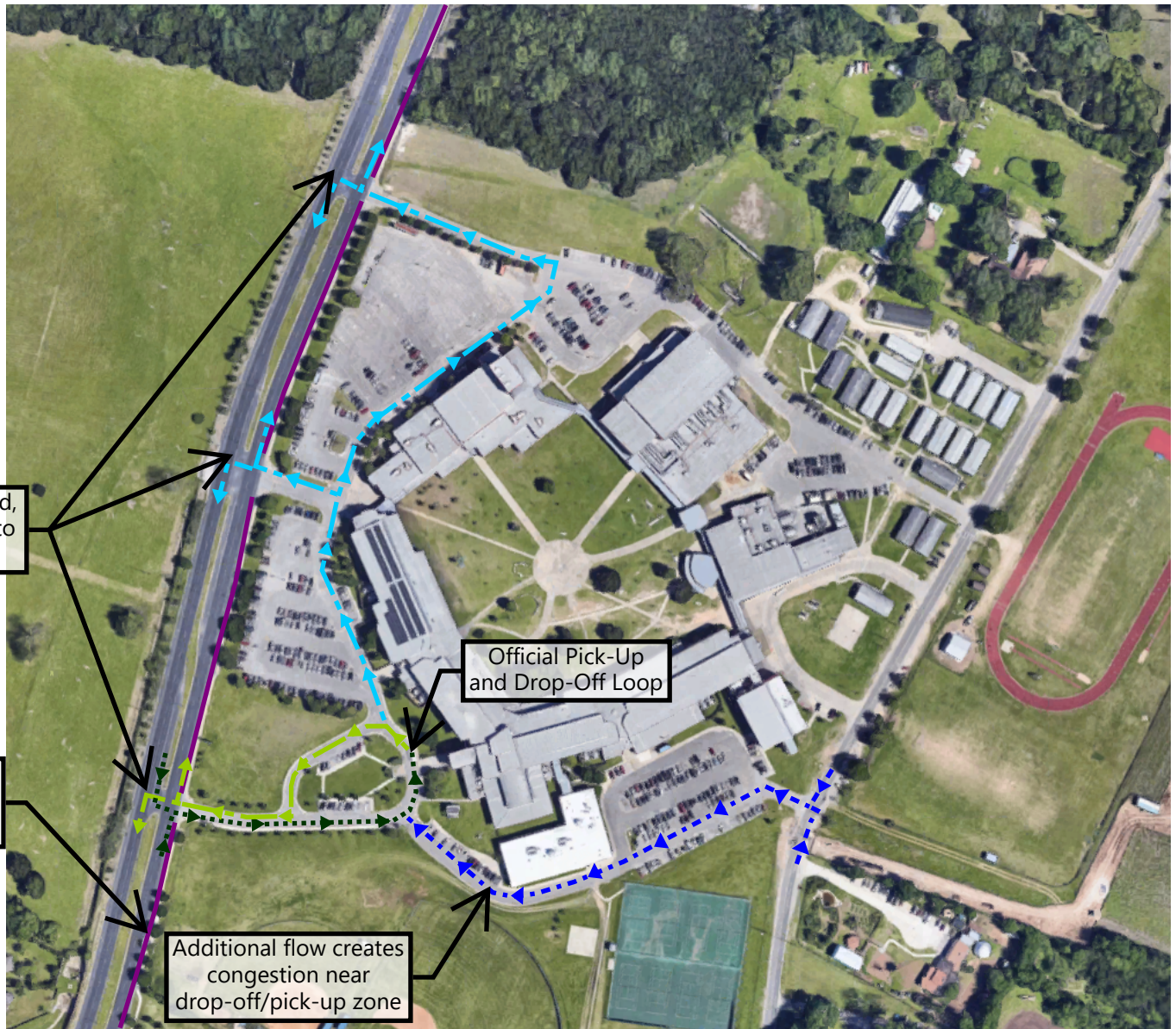




Image 1: Drop-off loop operating smoothly at 8:30 AM



Image 2: PHB creating gaps in South 1st Street traffic





Image 3: Pick-up loop filled to capacity



Image 4: Vehicles parked on South 1st Street waiting for pick-up

