# CITY COUNCIL MEETING MONDAY, SEPTEMBER 23, 2019 CITY COUNCIL AGENDA BEGINS ON PAGE 7



### **GLADSTONE CITY COUNCIL**

# OPEN STUDY SESSION MEETING MONDAY, SEPTEMBER 23, 2019

### **AGENDA**

TIME: 7:00 PM

1. Capital Improvements and Master Plan Update- Director Tim Nebergall will give an overview of the progress made over the last year.



# Department of Public Works Memorandum

DATE:

September 19, 2019

TO:

Scott Wingerson, City Manager

FROM:

Timothy A. Nebergall, Director of Public Works

RE:

Capital Improvements and Master Plans Update

Effective master planning and project implementation is essential to the long-term viability of the community. The purpose of this study session is to provide a brief overview of the progress made over the past year.

### City Street

The City continues to invest heavily in the maintenance of City streets and the completion of major street projects including Pleasant Valley Road, Old Pike Road, and NE 76<sup>th</sup> Street. The City has been awarded over \$4-M in federal grants and continues to work jointly with the Gladstone Special Road District to fund street improvements. The City has also submitted 7 projects to the Mid-America Regional Council (MARC) for inclusion in the 2050 Long-Range Transportation Plan including the Gladstone Parkway, Missouri Route 1 and NE 72<sup>nd</sup> Street Intersection Improvements, N. Antioch Road, N. Broadway, N. Oak Trafficway, NE 72<sup>nd</sup> Street, and the Vivion Road Trail. Additional funding for street maintenance is proposed as part of an anticipated 2020 financing package.

### Completed Projects:

- NE Pleasant Valley Road Improvements N. Indiana Avenue to N. Jackson Street in partnership with KCMO \$3.5-M
- 2018 Street Maintenance Program \$1-M

#### Under Construction:

- Old Pike Road Vivion Road to NW Englewood Road \$2.0-M
- 2019 Street Maintenance Program \$1.9-M

### Funded Projects:

• NE 76<sup>th</sup> Street – N. Oak Trafficway to N. Brooklyn Avenue - \$2.3-M

### Sidewalk Master Plan (2015)

Walkability is a major goal of the City of Gladstone. Approximately 9,000-linear feet of new sidewalk is currently programmed including:

### Completed Projects:

- NE Pleasant Valley Road N. Antioch Road to N. Jackson Street in conjunction with street improvements
- NE 64<sup>th</sup> Street Sidewalk N. Bellefontaine to N. Indiana \$50,000
- NE 64<sup>th</sup> Street and N. Antioch Road Pedestrian Signal Upgrades (Prospect Plaza) \$50,000

### **Under Construction:**

- Old Pike Road Vivion Road to NW Englewood Road \$2.0-M
- ADA Sidewalk Upgrades in conjunction with the 2019 Street Maintenance Program
- N. Broadway/NW 72<sup>nd</sup> Street Pedestrian Signal Upgrades \$230,000

### **Funded Projects**

- NE 72<sup>nd</sup> Street Missouri Route 1 to N. Olive Street \$25,000
- NE 76<sup>th</sup> Street N. Oak Trafficway to N. Brooklyn Avenue in conjunction with street improvements

### Stormwater Master Plan (2015)

The City continues to place an emphasis on stormwater management. Additional funding will be available after FY23 when a significant amount of debt has been repaid in the Capital Improvements Sales Tax fund (CIST).

### Completed Projects

- N. Locust & NE 70<sup>th</sup> Street Pipe Replacement in the vicinity of Iwerx \$50,000
- 301 NW 59<sup>th</sup> Terrace Bank Stabilization \$25,000

### Funded Projects

- Project No. 4 NE 76<sup>th</sup> Street and N. Tracy Avenue Storm Drainage \$90,000
- Carriage Commons Box Culvert \$100,000
- NE 68<sup>th</sup> Terrace & N. Bellefontaine \$85,000

### Sanitary Sewer Master Plans (2002)

In 2018, the City spent approximately \$20,000 in the Rock Creek basin to reduce infiltration and inflow into the sanitary sewer collection system. Approximately \$30,000 was spent in the Mill Creek basin to increase system capacity and reduce the risk of sanitary sewer backups. An additional \$100,000 is programmed in 2019 to replace approximately 400-linear feet of 8-inch sanitary sewer in the vicinity of 6510 N. Grand.

### Water Distribution Master Plan (2015)

Approximately 1.25-miles of new water main are currently under construction at a cost of approximately \$1-M. An additional \$2-M of water main replacement is planned as part of the anticipated 2020 financing package.

### Under Construction:

- N. Montgall/N. Agnes NE 67<sup>th</sup> Terrace to NE 67<sup>th</sup> Terrace
- N. Wabash M-1 to NE 64<sup>th</sup> Street
- N. Olive NE 61<sup>st</sup> Terrace to Shady Lane Drive
- N. Wayne NE 65<sup>th</sup> Street to NE 67<sup>th</sup> Terrace
- NE 75<sup>th</sup> Terrace N. Highland to N. Woodland

### Parks and Recreation Master Plan (2012)

In 2012, the City of Gladstone completed a Parks and Recreation Master Plan. This document established the framework for upgrades to the existing park system, the development of Hobby Hill Park, and the expansion of the City's trail system.

### Completed Projects

- Hobby Hill Park \$1.8-M
- Happy Rock Park Restroom/Shelter Improvements \$115,000
- Replacement of Happy Rock Park (West) and Oak Grove Playground Surfaces \$80,000
- Meadowbrook Park Improvements (Pickle Ball, Playground, Shelter) \$135,000

### Under Construction:

- Shoal Creek Trail N. Antioch Road to N. Brighton Avenue in partnership with KCMO -\$500,000
- Hobby Hill Disc Golf- \$25,000

### Funded:

- Rock Creek Trail Phase 2 Hidden Hollow Park to Missouri Route 1 \$600,000
- Linden Connector NIC to M-1 \$870,000

### Cultural Arts Master Plan (2014)

### **Funded Projects**

- Happy Rock Park Art \$50,000
- Temporary Art in Downtown \$5,000

### Facilities Master Plan (2015)

The City continues to pursue opportunities to improve City facilities. City-wide energy efficiency improvements were completed in 2018 utilizing an alternative financing mechanism called performance contracting. Financing was also secured to make upgrades at Public Works and City-wide facility improvements are proposed as part of the anticipated 2020 financing package.

### Completed Projects

• Public Works improvements including the installation of LED exterior lighting, and upgrades to common areas including the conference room and breakroom - \$200,000



### CITY COUNCIL MEETING GLADSTONE, MISSOURI MONDAY, SEPTEMBER 23, 2019

The City Council will meet in Closed Executive Session at 6:30 pm Monday, September 23, 2019, in the City Manager's office, Gladstone City Hall, 7010 North Holmes, Gladstone, Missouri. The Closed Executive Session is closed pursuant to RSMo. Open Meeting Act Exemption 610.021(1) for Litigation and Confidential or Privileged Communications with Legal Counsel, 610.021(2) Real Estate Acquisition Discussion, and 610.021(9) Employee Groups.

### **OPEN STUDY SESSION: 7:00 PM**

 Capital Improvements and Master Plan Update- Director Tim Nebergall will give an overview of the progress made over the last year.

# REGULAR MEETING: 7:30 PM TENTATIVE AGENDA

- 1. Meeting Called to Order.
- 2. Roll Call.
- 3. Pledge of Allegiance to the Flag of the United States of America.
- 4. Approval of Agenda.
- 5. Approval of the September 9, 2019, Closed City Council Meeting Minutes.
- 6. Approval of the September 9, 2019, Regular City Council Meeting Minutes.
- 7. PROCLAMATION: Fire Prevention Week

- 8. PROCLAMATION: Volunteer Appreciation Week
- 9. PROCLAMATION: Volunteers in Police Service Program
- 10. PROCLAMATION: Code Enforcement Month
- 11. CONSENT AGENDA

**RESOLUTION R-19-48** A Resolution authorizing the City Manager to execute an agreement for Audit Services for the City of Gladstone, Missouri, with Berberich Trahan & Co. P.A. (BT & Co.)

**RESOLUTION R-19-49** A Resolution authorizing Change Order No. 13 in the amount of \$156,320.00 to the contract with Lan-Tel Communications Services, Incorporated, for the 2019 Curb, Gutter, and Sidewalk Project TP1804.

**RESOLUTION R-19-50** A Resolution authorizing Change Order No. 1 in the amount of \$242,212.20 to the contract with Metro Asphalt Incorporated, for the 2019 Mill and Overlay Program Project TP2006.

**APPROVE OUTDOOR SPECIAL EVENT PERMIT**: iWerx Promotional Event, 602 Northeast 70<sup>th</sup> Street, Linden Square, Sunday, September 29, 2019, 2:00 – 10:00 pm.

APPROVE FINANCIAL REPORT FOR TWO MONTHS ENDING AUGUST 2019

### **REGULAR AGENDA**

- 12. Communications from the Audience.
- 13. Communications from the City Council.
- 14. Communications from the City Manager.
- **15. RESOLUTION** R-19-51 A Resolution authorizing acceptance of a proposal from Superion LLC, a subsidiary of Square Technologies, Lake Mary, Florida, for the purchase of Public Administration Software for the total purchase amount of \$373,814.20.

- 16. FIRST READING BILL NO. 19-40 An Ordinance directing the City Manager to participate in the Missouri Highways and Transportation Commission Blueprint for Safer Roadways Program and sign an agreement with the Commission to utilize State Road Funds in an amount of no more than \$6,007.00 for the purchase of Radar Speed Signs for the City of Gladstone.
- 17. PUBLIC HEARING: Site Plan Revision for property at 6221 North Chestnut Avenue.
- 18. FIRST READING BILL NO. 19-41 An Ordinance approving a Site Plan Revision for property at 6221 North Chestnut Avenue.
- 19. Other Business.
- **20.** Adjournment.

Representatives of the News Media may obtain copies of this notice by contacting:

City Clerk Ruth Bocchino Posted at 1:45 pm City of Gladstone 7010 North Holmes Gladstone, MO 64118 816-423-4096

September 19, 2019



# MINUTES REGULAR CITY COUNCIL MEETING GLADSTONE, MISSOURI MONDAY, SEPTEMBER 9, 2019

**PRESENT:** Mayor Carol Suter

Mayor Pro Tem Jean Moore Councilman Bill Garnos Councilman Kyle Yarber

City Manager Scott Wingerson

Attorney Chris Williams

**ABSENT:** Councilman R.D. Mallams

Assistant City Manager Bob Baer

City Clerk Ruth Bocchino

Item No. 1. On the Agenda. Meeting Called to Order.

Mayor Suter opened the Regular City Council Meeting Monday, September 9, 2019, at 8:01 pm in the Gladstone City Council Chambers.

Item No. 2. On the Agenda. ROLL CALL.

All Councilmembers were present with the exception of Councilman R.D. Mallams.

<u>Item No. 3. On the Agenda</u>. PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA.

Mayor Suter asked all to join in the Pledge of Allegiance to the Flag of the United States of America.

Item No. 4. On the Agenda. Approval of Agenda.

The Agenda was approved as published.

<u>Item No. 5. On the Agenda.</u> Approval of the August 26, 2019, Closed City Council Meeting Minutes.

Mayor Pro Tem Moore moved to approve the minutes of the August 26, 2019, Closed City Council meeting as presented. Councilman Yarber seconded. The Vote: "aye", Councilman

Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

<u>Item No. 6. On the Agenda.</u> Approval of the August 26, 2019, Regular City Council Meeting Minutes.

Councilman Garnos moved to approve the minutes of the August 26, 2019, Regular City Council meeting as presented. Mayor Pro Tem Moore seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

### Item No. 7. On the Agenda. PROCLAMATION: Constitution Week

Mayor Suter read the Proclamation and presented to: Maggie Henderson, Jean McHenry, Kay Schaefer, Myrl Palmer, and Ruth Woody.

### Item No. 8. On the Agenda. CONSENT AGENDA.

Following the Clerk's reading:

Mayor Pro Tem Moore moved to approve the Consent Agenda as published. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Mayor Pro Tem Moore moved to approve RESOLUTION R-19-41 A Resolution authorizing acceptance of a proposal from Premier Picks, LLC, doing business as Performance Fitness Equipment, for the acquisition of five (5) treadmills in the total amount of \$35,750.00. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Mayor Pro Tem Moore moved to approve RESOLUTION R-19-42 A Resolution authorizing the City Manager to execute a contract with Vance Brothers, Incorporated, in the total amount not to exceed \$174,500.00 for the 2019 Intermediate Maintenance Project TP2003. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Mayor Pro Tem Moore moved to approve RESOLUTION R-19-43 A Resolution authorizing acceptance of a proposal from Independent Salt Company for the purchase of snow removal salt. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Mayor Pro Tem Moore moved to approve RESOLUTION R-19-44 A Resolution accepting easements from certain property owners in conjunction with the Northeast 76<sup>th</sup> Street Improvements Project from North Oak Trafficway to North Brooklyn, Project TP1818. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Mayor Pro Tem Moore moved to APPROVE OUTDOOR SPECIAL EVENT PERMIT: Scarecrow 5K Run/Walk; 602 NE 70<sup>th</sup> Street, Linden Square (start/finish); Sunday, October 6, 2019 5:30 am – 9:30 am. Run/walk starts at 7:30 am. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

### REGULAR AGENDA.

Item No. 9. On the Agenda. Communications from the Audience.

There were none.

Item No. 10. On the Agenda. Communications from the City Council.

**Councilman Yarber** stated: "I'll try to keep it quick tonight. A new display at the Atkins-Johnson house, just in time to realize we are approaching Halloween. All Hallows Eve display in the room at the Atkins-Johnson House."

**Councilman Garnos** stated: "I just wanted to mention Gladfest is less than a month away. Our big celebration. A lot is going to be happening in the next month to get ready."

Mayor Pro Tem Moore stated: "I just had a couple of things. I had the opportunity along with several other Councilmembers to attend the MARC Open House on the future of North Oak Trafficway last week. It was a little confusing but interesting and obviously something that we all need to be engaged with. I attended the Big Shoal Country Fair on Saturday and I did have a chance to look at that exhibit and it was curated by our own Erica Layton. She loves doing that job herself and it is really fun. Some people have birthdays on Halloween, so that's makes it kind of fun, Mr. Nebergall. I would also like to extend two congratulations for staff: to Beth Gillespie who was awarded the Animal Control Officer of the Year by the Missouri Animal Control Association. I think that is a big KUDO for Beth and that department. Also, congratulations to Division Chief Sean Daugherty for completing the Executive Fire Officer Program."

Mayor Suter stated: "Thank you; I'll second that emotion for Officer Beth Gillespie. I'm pretty sure it was the snake handling that put her right over the top. What an honor; delighted when Gladstone folks are recognized for the great work they do. It's been a busy couple of weeks, of course, always, in the City and for the Mayor. I attended the Organizing Committee for the Complete Streets. Rather confusing, thinking about North Oak. There are some interesting ideas and many ideas have been launched over the years for North Oak and unfortunately almost all of those plans don't fit because they never get funded. It can be a little bit frustrating. I had the privilege of volunteering at the Atkins-Johnson Country Fair. Eugene and I are sponsors so we attended the VIP Event on Friday night which was very nice. We had wonderful weather. The last I heard, in the first couple of hours, over 600 people had come through the till. I don't know how it ended up but hopefully it would have been good attendance. (over 900). It was a beautiful day. I had the opportunity on Saturday night to attend a Gala for the Mid-American Asian American Cultural Association; their annual Gala. That is the organization that presented us

with that fine piece of art that is in the lobby. We connected at the Grand Opening of Saigon Plaza and so I was invited to attend and to give out some of the awards for the evening. It was a very interesting event. There are 62 different nations who are involved in that organization and so it was quite an interesting, colorful event. I want to encourage folks to go on the MARC website, the Transportation 2050 Plan. This is a long term plan for the region for transportation funding by the federal government. If you have a project in that plan, than you have a much better chance between now and then getting some federal funding for it. We have had several projects in the current plan which is the 2040 Plan. We are now in the process of having to update for the 2050 Plan. Gladstone has six projects that are in the hopper so they are available for public comment. And public comment matters. If we can encourage people to go on, you just go online, go to Gladstone in that 2050 Plan, each of the projects is listed, and then you have an opportunity to say why you think it is important or I guess you could criticize, but we are hoping most people will find those projects important ant it will help us to try to make sure that some of them stay in the 2050 Plan and enhance our ability to get them funded. The last item, a few weeks ago, a month ago or so, I reported that City Manager Wingerson and I had an interesting conversation and interview with the reporter from the Business Journal and we hoped it would produce something. Well, it's going to produce something. Watch for the Business Journal this week. The City of Gladstone will be the featured centerpiece story for this week's issue. We are hoping that it turns out well. The photographer has been hanging around for about a week doing some photos, the reporter has been looking at all kinds of data and talking to lots of people, the City Manager has done a great job of providing background information. I think they are enthralled with what they see as a small town with big dreams, or something like that; and so I hope that is going to be the nature of the story. We won't know exactly until it comes out so watch for this week's edition. Thank you, City Manager Wingerson, for all the extra time and effort it took to cooperate with this effort."

### Item No. 11. On the Agenda. Communications from the City Manager.

City Manager Wingerson stated: "Three quick things, Mayor and Council. Shout out to our Public Works personnel who worked over the weekend repairing a water main break at 72<sup>nd</sup> and Tracy. They were able to get the traffic control put away off to the sides early this morning so it had an impact all weekend but we did a great job getting that repaired. It's a pretty big main and it's pretty deep so it takes a lot of skill and care to do that properly. We appreciate their work over the weekend. Second thing; shout out to fire personnel Andy Starz and Jason Lawson who completed the 9-1-1 Memorial Stair Climb over the weekend. It's always great that they do that, to take their time and allow us the opportunity to reflect on what happened on September 11<sup>th</sup>. Finally, Gorilla Dance Club is Friday night at Linden Square. It should be a good time for all."

<u>Item No. 12. On the Agenda.</u> PUBLIC HEARING: Site Plan Revision for property at 6221 North Chestnut Avenue. (This public hearing was opened and immediately continued to the September 23, 2019, City Council meeting.)

Mayor Suter opened the Public Hearing at 8:17 pm and continued the Public Hearing to September 23<sup>rd</sup>, 2019.

<u>Item No. 13. On the Agenda.</u> RESOLUTION R-19-45 A Resolution authorizing acceptance of a proposal from Zuercher Technologies, a Central Square Technologies Company, Sioux Falls, South Dakota, for the purchase of a Computer-Aided Dispatching and Records Management Software for the total purchase amount of \$212,221.00.

Mayor Pro Tem Moore moved to approve RESOLUTION R-19-45 A Resolution authorizing acceptance of a proposal from Zuercher Technologies, a Central Square Technologies Company, Sioux Falls, South Dakota, for the purchase of a Computer-Aided Dispatching and Records Management Software for the total purchase amount of \$212,221.00. Councilman Yarber seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Item No. 14. On the Agenda. RESOLUTION R-19-46 A Resolution authorizing acceptance of a proposal from American Response Vehicles (ARV), Columbia, Missouri, for the purchase of one 2019 AEV Traumahawk Type III Ambulance on a Chevrolet G4500 Chassis with equipment and one additional Stryker Power-Pro XT Powered Ambulance Cot for the total purchase amount of \$247,883.00.

Councilman Yarber moved to approve RESOLUTION R-19-46 A Resolution authorizing acceptance of a proposal from American Response Vehicles (ARV), Columbia, Missouri, for the purchase of one 2019 AEV Traumahawk Type III Ambulance on a Chevrolet G4500 Chassis with equipment and one additional Stryker Power-Pro XT Powered Ambulance Cot for the total purchase amount of \$247,883.00. Mayor Pro Tem Moore seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

<u>Item No. 15. On the Agenda.</u> RESOLUTION R-19-47 A Resolution authorizing acceptance of a proposal from Shawnee Mission Ford, Shawnee, Kansas, for the purchase of four (4) 2020 Ford Police Interceptor SUV vehicles for the total purchase amount of \$133,016.00.

Councilman Garnos moved to approve RESOLUTION R-19-47 A Resolution authorizing acceptance of a proposal from Shawnee Mission Ford, Shawnee, Kansas, for the purchase of four (4) 2020 Ford Police Interceptor SUV vehicles for the total purchase amount of \$133,016.00. Councilman Yarber seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)

Item No. 16. On the Agenda. APPROVE BUILDING PERMIT: Hy-Vee Aisles Online Kiosk.

Mayor Suter asked if staff had any presentation.

City Manager Wingerson stated: "We certainly stand to answer any questions that the Council may have. There are product boards in front of you, in front of the tables here, you can take a look at. This is in relation to a Site Plan approval that was granted just a few months ago by the Council. There is a representative from Hy-Vee here tonight if he would like to step to the podium and introduce himself."

**Mayor Suter** stated: "That would be helpful. We are interested in the time-frame of the number of things you have going on there. We have been reading about Hy-Vee Corporate in the newspaper today."

John Brown with Hy-Vee approached Council and stated: "Good evening, Mayor and Council. I'll start with the approval for the Aisles Online Kiosk. I just stopped by the store today. We did start construction. What you are looking at here is the Aisles Online Kiosk. The brick on the corners and all the elevations matches the building with darker brick on the bottom as an accent that matches some of the tone in the brick here. This material is an EIFS material which is the same material we have, same material, same color, that is on the store itself. This top is a glossy poly material to make it easy for customers to find where those kiosks are and get their vehicles over to it. Along the back, in order to dress this building up a little bit are windows. They are not actually windows; it's called faux glass; it's actually glass, actually a window frame, it just doesn't have any views into the building. It faces 72nd Street. This side that faces the store has three of the same spando glass panels and it also has a limited access door. Only employees are allowed in this space. Customers come up and the employee that is in the kiosk will know that they are there. There is a sensor in the pavement and they will bring the groceries right out and put them in the trunk for the customer. The customer signs for it and they are off. We are hoping it works really well. We expect that the fulfillment center that we are building in the Kansas City area will be done at the end of October and this will be up and running and waiting for that facility."

Mayor Suter stated: "So the timetable is to begin this immediately?"

Mr. Brown stated "The timetable is to begin ASAP."

Mayor Suter stated: "And then the Convenience Store and...?"

Mr. Brown stated "In addition we are also remodeling the Convenience Store. It will become a Hy-Vee Fast and Fresh. Just a little different model than what is there now. We will still have the convenience items and we will also have healthier options, grocery top off items, quick graband-go type items for guys like me who don't want to walk all the way to the back for a gallon of milk. You won't have to do that at Fast and Fresh, you can get in and get out. The store is also being remodeled as well. All three of these construction projects started today. There are trees we are taking down, the Ash trees that were in the parking lot have to be removed so that was step one. That is in process today."

**Councilman Garnos** stated: "I'm fully supportive of all of this but I noticed when I was looking at the plans there is quite a bit of change with the landscaping, all the trees coming down, and then those are being replaced with shorter shrubbery? Is that right? I know this hasn't changed since the last time I looked at it."

Mr. Brown stated: "The plan you are seeing here doesn't have any trees in those parking lot islands and that is because those trees were not supposed to come down. I've been to the store and I have already sent off a nasty email. They will be replaced. There are 13 trees that were

taken down that were not supposed to have been taken down. There were a lot of trees that were Ash or had disease problems and those did need to come down. I'm not sure what happened there but we will correct the situation."

Mayor Suter stated: "Some of those were along the front, near the highway."

Mr. Brown stated: "The areas that are affected are the islands and the parking lot."

Mayor Pro Tem Moore stated: "So for the kiosk, do I get out of my car? So the person who is fulfilling my order is going to be subject to all the elements, because there is no pergola, no cover, there is no anything; they just have to come out in the weather."

Mr. Brown stated: "Unfortunately, on most of our Aisles Online Kiosks have a canopy over them but we just didn't have the room at this site. Yes, they will have rain gear and umbrellas. They will be subject to the elements so our customers don't have to leave the car."

**Mayor Suter** stated: "So nobody will be picking up online orders under where they are now, where the drive-through and pick up is."

Mr. Brown stated: "No, that will be reserved for people who want to buy their groceries inside, register, and want help getting them loaded in their car. We know, we have built one that has helped with congestion along the front of the store. It gets that traffic away from that pick up lane."

Mayor Suter stated: "So there is just traffic going both directions alongside of this building, right, there is no parking up against it, or is there parking up against it?"

Mr. Brown stated: "Those four areas that I just pointed to are really wide parking stalls. They are about 16 feet with the loading zone so that the car can come out of the Aisles Online Kiosk; those are for Aisles Online pick up customers. A customer can come off of  $72^{nd}$  either West or East entrance, pull in, get their groceries, and then get back out on  $72^{nd}$  or if they are daring they can get back down to Highway 1."

**Mayor Suter** stated: "And then you are redoing the existing parking that is on the corner of the building now, where I always park, in those five spots? They are not going to be there anymore?"

Mr. Brown stated: "That is correct. We are actually adding some parking there. When we built the C-Store originally, we reduced the parking count basically to the city minimum and in order to keep our parking ratio where it needs to be, we had to modify that area and add some parking."

**Mayor Suter** stated: "And you are repaying the driveways, right? Especially the one on the East is in terrible shape."

Mr. Brown stated: "Yes."

Mayor Carol J. Suter

<b>Mayor Suter</b> stated: "We love to see properties improved and new things coming so we appreciate Hy-Vee's investment in this community."			
Mr. Brown stated: "Thank you very much."			
Mayor Pro Tem Moore moved to APPROVE BUILDING PERMIT: Hy-Vee Aisles Online Kiosk. Councilman Garnos seconded. The Vote: "aye", Councilman Kyle Yarber, Councilman Bill Garnos, Mayor Pro Tem Jean Moore, and Mayor Carol Suter. (4-0)			
Item No. 17. On the Agenda. Other Business.			
There was no other business to come before the Council.			
Item No. 18. On the Agenda. Adjournment.			
Mayor Suter adjourned the September 9, 2019, Regular City Council meeting at 8:28 pm.			
Respectfully submitted:			
Ruth E. Bocchino, City Clerk			
Approved as presented:			
Approved as modified:			

WHEREAS, the City of Gladstone, Missouri, is committed to ensuring the safety and security of all those living in and visiting Gladstone and fire is a serious public safety concern both locally and nationally; homes are the locations where people are at greatest risk from fire; and

WHEREAS, home fires killed 2,630 people in the United States in 2017, according to the National Fire Protection Association® (NFPA®); fire departments in the United States responded to 357,000 home fires with the majority of US fire deaths (4 out of 5) occurring at home each year. The fire death rate per 1000 home fires reported to US fire departments was 4 percent higher in 2017 than in 1980; and

WHEREAS, when the smoke alarm sounds Gladstone residents may have less than two minutes to escape to safety. Gladstone residents who have planned and practiced a home fire escape plan are more prepared and will therefore be more likely to survive a fire. Gladstone residents should make a home escape plan, drawing a map of each level of the home, showing all doors and windows. Gladstone residents should practice the home fire escape plan with everyone in the household, including visitors. Gladstone residents should practice the home fire escape drill at least twice a year, during the day and at night. Gladstone residents should teach children to escape on their own in case adults can't help them; and

WHEREAS, Gladstone residents should make sure everyone in the home knows how to call 9-1-1 or the local emergency number from a cell phone or a neighbor's phone. Gladstone residents should practice using different ways out and Gladstone residents in a real emergency should get low and go under the smoke to get out quickly. Gladstone residents should get out and stay out, never going back inside the home for people, pets, or things. Gladstone residents are responsive to public education measures and are able to take action to increase their safety from fire, especially in their homes; and

WHEREAS, the 2019 Fire Prevention Week theme, "Not Every Hero Wears a Cape. Plan and Practice Your Escape!" effectively serves to remind us that we need to take personal steps to increase our safety from fire.

**THEREFORE,** I Carol J. Suter, Mayor of Gladstone, Missouri, on behalf of the City Council and citizens of Gladstone, do hereby proclaim October 6–12, 2019, as:

### FIRE PREVENTION WEEK

throughout Gladstone, and I urge all the people of Gladstone to be aware of their surroundings, look for available ways out in the event of a fire or other emergency, respond when the smoke alarm sounds by exiting the building immediately, and to support the many public safety activities and efforts of Gladstone's fire and emergency services during Fire Prevention Week 2019.

WHEREAS, volunteering one's time and resources has traditionally been, and continues to be, an elemental part of the essence and tradition of our country and is essential to its spirit and vitality; and

WHEREAS, for over 29 years the Gladstone Emergency Volunteers, comprised of numerous dedicated volunteers and thousands of hours, have taken time out of their own demanding lives to help make the City of Gladstone a better place to live, and they make significant contributions to bettering social, community and cultural conditions of the City of Gladstone; and

WHEREAS, those individuals have become a vital and positive force in our community and demonstrated a common conviction: that charity and social responsibility manifest all that is good in the individual, and the wellbeing of the community is largely on the helping of others; and

WHEREAS, volunteerism is vital, fulfilling, and enriching to the participants as well as to the recipients of the service and should be encouraged for the benefits to all and the community at large; and

WHEREAS, the City Council recognizes the value of the men and women of the Gladstone Emergency Management Association volunteers, through their volunteer work at Theater in the Park, Fourth of July celebration, the annual Gladfest and numerous other events along with storm spotting and assisting Gladstone Public Safety in emergency situations.

**NOW, THEREFORE**, I, Carol J. Suter, Mayor of the City of Gladstone, Missouri, on behalf of the City Council and Gladstone residents, do hereby proclaim October 2019 as

### **VOLUNTEER APPRECIATION MONTH**

and thank all of our volunteers for their dedication and service to the City and urge our residents to recognize the valuable work done by volunteers.

WHEREAS, the Volunteers in Police Service Programs ultimate goal is to enhance the capacity of state and local law enforcement to engage volunteers in lasting partnerships that improve public safety and quality of life in the communities they serve; and

WHEREAS, VIPs volunteers have made a selfless, generous commitment to the City of Gladstone; and

**WHEREAS**, the "V.I.P.S." volunteers have been an invaluable asset to the Gladstone Police and City of Gladstone, performing important volunteer tasks such as vacation house checks, property room organization and any other duty or detail that may be assigned to them; and

WHEREAS, the tasks completed by the Police Volunteers have enabled the Gladstone Police officers to be more readily available for emergency, and other priority 911 calls; and

WHEREAS, the selfless volunteer service of the aforementioned "V.I.P.S." Police Volunteers has created an undeniable benefit to the citizens of Gladstone, Gladstone Police and the City of Gladstone.

**NOW, THEREFORE, BE IT RESOLVED,** I Carol J. Suter, Mayor of the City of Gladstone, Missouri, on behalf of the members of the Gladstone City Council and all Gladstone residents, do hereby desire to publicly acknowledge and thank all of the aforementioned Police Volunteers for their loyal, dedicated, and devoted service to the City of Gladstone.

WHEREAS, Code Compliance Officers provide for the safety, health, and welfare of citizens living in communities throughout the United States through the enforcement of building, zoning, housing, fire safety, environmental, and other codes and ordinances; and

WHEREAS, Code Compliance Officers are dedicated, well-trained and highly responsible individuals who take their jobs seriously, and are proud of their departments and local government within which they serve, and are committed to saving lives and improving neighborhoods in the course of their daily jobs; and

WHEREAS, the American Association of Code Enforcement hosts its Annual Conference during the month of October each year; and

WHEREAS, the American Association of Code Enforcement, acting on behalf of its more than 1,200 members, requests that October be set aside to honor and recognize Code Compliance Officers and to highlight the contributions these individuals have made to improve communities throughout the United States, in particularly the City of Gladstone; and we extend our heartfelt thanks to Code Compliance Officers for their continued commitment to public service; and

WHEREAS, Code Compliance Officers urge the people of Gladstone be aware of code violations, work with the City to remediate code violations, and to maintain the vitality and charismatic appearance of the City; providing for a safe, healthy, and prosperous community.

**NOW, THEREFORE, I, CAROL J. SUTER,** Mayor of the City of Gladstone, Missouri, on behalf of the members of the Gladstone City Council and all Gladstone residents, do hereby proclaim October 2019, as:

### NATIONAL CODE ENFORCEMENT MONTH

### **RESOLUTION NO. R-19-48**

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT FOR AUDIT SERVICES FOR THE CITY OF GLADSTONE, MISSOURI, WITH BERBERICH TRAHAN & CO. P.A. (BT & CO.)

WHEREAS, proposals were received for professional audit services, and the proposal of Berberich Trahan & Co. P.A. for such services has been determined by the Audit Selection Committee to be the best overall bid; and

WHEREAS, the total annual cost for the audit and Comprehensive Annual Financial Report preparation is \$38,250 for FY19 audit with a 2% annual increase for each future audit.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, AS FOLLOWS:

**THAT,** the City Manager of the City of Gladstone, Missouri is hereby authorized to negotiate and execute a contract with Berberich Trahan & Co. P.A. for a period of five years subject to annual renewal and budget appropriations commencing on July 1,2019 through June 30, 2023, with optional annual renewals thereafter.

INTRODUCED, READ, PASSED AND ADOPTED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, THIS 23<sup>rd</sup> DAY OF SEPTEMBER 2019.

	Mayor Carol J. Suter		
ATTEST:			
Ruth E. Bocchino			



# Request for Council Action

RES ⊠# R-19-48	BILL □# City Cler	k Only Ol	RD # City Clerk Only
Date: 9/17/2019		De	epartment: Finance
Meeting Date Requested: 9/2	23/2019		
Public Hearing: Yes Da	te: Click here to er	nter a date.	
Subject: Audit Services			
ended with the completion of Report (CAFR). A request for breakdown of expenses for au firm and staff qualifications. The evaluated by the Director of F	the 2018 fiscal year and reproposals was drafted a dit of the financial state. The City received one profinance and Senior Acceptable and audit firm, states	it and completion of and posted on the C ments, single audit, roposal by the previ- buntant and deemed off is recommending	nan & Co. P.A. for the City of Gladston of the Comprehensive Annual Financia ity's website. The RFP requested a and assistance for the CAFR, as well ous auditors. The proposal was to be reasonable. Given the cost and the accepting the proposal from Berberick
Budget Discussion: Funds at Public Safety Sales Tax, Cor year. Ongoing costs are estin Previous years' funding was	mbined Waterworks and mated to be \$39,025, \$3	d Sewerage System	m the General, Community Center, Fund with a 2% increase per and \$41,440, respectively annually
Public/Board/Staff Input: Re	esolution, sealed bid and	proposal to follow	
Provide Original Contracts,	Leases, Agreements, et	c. to: City Clerk ar	nd Vendor
Dominic Accurso Department Director/Admin	istrator	City Attorney	SW City Manager



August 26, 2019

Mr. Scott Wingerson, City Manager City of Gladstone, Missouri 7010 N. Holmes Street Gladstone, Missouri 64118

### The Objective and Scope of the Audit of the Financial Statements

You have requested that we audit the City of Gladstone, Missouri's (the City) governmental activities, business-type activities, the discretely presented component unit, each major fund and aggregate remaining fund information as of and for the year ended June 30, 2019 which collectively comprise the basic financial statements. We will also apply certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America and will report on whether supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter.

Our audit will be conducted with the objective of our expressing an opinion on the financial statements.

You have informed us that you desire us to issue a report on the basic financial statements of the City as of and for the year ended June 30, 2019 conforming only to the requirements of auditing standards generally accepted in the United States of America. This reporting will not be used for purposes to comply with a requirement calling for an audit in accordance with *Government Auditing Standards*.

We will also perform the audit of the City as of June 30, 2019, so as to satisfy the audit requirements imposed by the Single Audit Act and Subpart F of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance).

#### The Responsibilities of the Auditor

We will conduct our audit in accordance with auditing standards generally accepted in the United States of America (GAAS); "Government Auditing Standards" (GAS) issued by the Comptroller General of the United States; and the provisions of the Single Audit Act, Subpart F of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), and U.S. Office of Management and Budget's (OMB) Compliance Supplement. Those standards, regulations, supplements, or guides require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.



Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS. Also, an audit is not designed to detect errors or fraud that is immaterial to the financial statements. The determination of abuse is subjective; therefore, GAS does not expect us to provide reasonable assurance of detecting abuse.

In making our risk assessments, we consider internal control relevant to the City's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit.

We will also communicate to the City (a) any fraud involving senior management and fraud (whether caused by senior management or other employees) that causes a material misstatement of the financial statements that becomes known to us during the audit, and (b) any instances of noncompliance with laws and regulations that we become aware of during the audit (unless they are clearly inconsequential).

The component unit whose financial statements you have told us are to be included as part of the City's basic financial statements is the Gladstone Special Road District No. 3.

We are responsible for the compliance audit of major programs under the Uniform Guidance, including the determination of major programs, the consideration of internal control over compliance, and reporting responsibilities.

Our report on internal control will include any significant deficiencies and material weaknesses in controls of which we become aware as a result of obtaining an understanding of internal control and performing tests of internal control consistent with requirements of the standards and circulars identified above. Our report on compliance matters will address material errors, fraud, abuse, violations of compliance obligations, and other responsibilities imposed by state and federal statutes and regulations or assumed by contracts, and any state or federal grant, entitlement, or loan program questioned costs of which we become aware, consistent with requirements of the standards and regulations identified above.

### The Responsibilities of Management and Identification of the Applicable Financial Reporting Framework

Our audit will be conducted on the basis that management and when appropriate, those charged with governance, acknowledge and understand that they have responsibility:

- a. For the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America;
- b. To evaluate subsequent events through the date the financial statements are issued or available to be issued, and to disclose the date through which subsequent events were evaluated in the financial statements. Management also agrees that it will not evaluate subsequent events earlier than the date of the management representation letter referred to below.
- c. For the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error;
- d. For establishing and maintaining effective internal control over financial reporting and for informing us of all significant deficiencies and material weaknesses in the design or operation of such controls of which it has knowledge;
- e. For report distribution; and



f. To provide us with:

(1) Access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements such as records, documentation, and other matters;

(2) Additional information that we may request from management for the purpose of the audit;

(3) Unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence;

(4) When applicable, a summary schedule of prior audit findings; and

(5) If applicable, responses to any findings reported on the schedule of findings and questioned costs.

As part of our audit process, we will request from management written confirmation concerning representations made to us in connection with the audit, including among other items:

a. That management has fulfilled its responsibilities as set out in the terms of this letter; and

b. That it believes the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

Management is responsible for identifying and ensuring that City complies with the laws and regulations applicable to its activities, and for informing us about all known material violations of such laws or regulations. In addition, management is responsible for the design and implementation of programs and controls to prevent and detect fraud or abuse, and for informing us about all known or suspected fraud or abuse affecting the City involving management, employees who have significant roles in internal control, and others where the fraud or abuse could have a material effect on the financial statements or compliance. Management is also responsible for informing us of its knowledge of any allegations of fraud or abuse or suspected fraud or abuse affecting the City received in communications from employees, former employees, analysts, regulators, short sellers, or others.

Management is responsible for the preparation of the supplementary information presented in relation to the financial statements as a whole in accordance with accounting principles generally accepted in the United States of America. Management agrees to include the auditor's report on supplementary information in any document that contains the supplementary information and that indicates that the auditor has reported on such supplementary information. Management also agrees to present the supplementary information with the audited financial statements or, if the supplementary information will not be presented with audited financial statements, to make the audited financial statements readily available to the intended users of the supplementary information no later than the date of issuance of the supplementary information and the auditor's report thereon.

Because the audit will be performed in accordance with the Single Audit Act and the Uniform Guidance, management is responsible for (a) identifying all federal awards received and expended; (b) preparing the schedule of expenditures of federal awards (including notes and noncash assistance received) in accordance with Uniform Guidance requirements; (c) internal control over compliance; (d) compliance with federal statutes, regulations, and the terms and conditions of federal awards; (d) making us aware of significant vendor relationships where the vendor is responsible for program compliance; (f) following up and taking corrective action on audit findings, including the preparation of a summary schedule of prior audit findings and a corrective action plan; and (g) submitting the reporting package and data collection form.

The City Council is responsible for informing us of its views about the risks of fraud or abuse within the City, and its knowledge of any fraud or abuse or suspected fraud or abuse affecting the City.



You have informed us that you may issue public debt in the future and that you may include our report on your financial statements in the offering statement. You have further informed us that you do not intend that we be associated with the proposed offering.

We agree that our association with any proposed offering is not necessary, providing the City agrees to clearly indicate that we are not associated with the contents of any such official statement or memorandum. The City agrees that the following disclosure will be prominently displayed in any such official statement or memorandum:

Berberich Trahan & Co., P.A., our independent auditor, has not been engaged to perform, and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. Berberich Trahan & Co., P.A., also has not performed any procedures relating to this [official statement] [memorandum].]

Because Berberich Trahan & Co., P.A. will rely on the City and its management and City Council to discharge the foregoing responsibilities, the City holds harmless and releases Berberich Trahan & Co., P.A., its directors, and employees from all claims, liabilities, losses, and costs arising in circumstances where there has been a knowing misrepresentation by a member of the City's management which has caused, in any respect, Berberich Trahan & Co., P.A.'s breach of contract or negligence. This provision shall survive the termination of this arrangement for services.

### Records and Assistance

If circumstances arise relating to the condition of the City's records, the availability of appropriate audit evidence or indications of a significant risk of material misstatement of the financial statements because of error, fraudulent financial reporting, or misappropriation of assets which, in our professional judgment, prevent us from completing the audit or forming an opinion, we retain the unilateral right to take any course of action permitted by professional standards, including declining to express an opinion, issue a report, or withdraw from the engagement.

During the course of our engagement, we may accumulate records containing data that should be reflected in the City's books and records. The City will determine that all such data, if necessary, will be so reflected. Accordingly, the City will not expect us to maintain copies of such records in our possession.

The assistance to be supplied by City personnel, including the preparation of schedules and analyses of accounts, has been discussed and coordinated with Dominic Accurso, Director of Finance. The timely and accurate completion of this work is an essential condition to our completion of the audit and issuance of our audit report.

In connection with our audit, you have requested us to perform certain non-audit services necessary for the preparation of the financial statements, including preparing the financial statements and note disclosures. The GAS independence standards require that the auditor maintain independence so that opinions, findings, conclusions, judgments, and recommendations will be impartial and viewed as impartial by reasonable and informed third parties. Before we agree to provide a non-audit service to the City, we determine whether providing such a service would create a significant threat to our independence for GAS audit purposes, either by itself or in aggregate with other non-audit services provided. A critical component of our determination is consideration of management's ability to effectively oversee the non-audit service to be performed. The City has agreed that Dominic Accurso, Director of Finance, possesses suitable skill, knowledge, or experience and that the individual understands the non-audit services to be performed sufficiently to oversee them. Accordingly, the management of the City agrees to the following:



- 1. The City has designated Dominic Accurso, Director of Finance, as a senior member of management, who possesses suitable skill, knowledge, and experience to oversee the services.
- 2. Dominic Accurso, Director of Finance, will assume all management responsibilities for subject matter and scope of the non-audit services listed above.
- 3. The City will evaluate the adequacy and results of the services performed.
- 4. The City accepts responsibility for the results and ultimate use of the services.

GAS further requires we establish an understanding with the management and those charged with governance of the objectives of the non-audit service, the services to be performed, the City's acceptance of its responsibilities, the auditor's responsibilities, and any limitations of the non-audit service. We believe this letter documents that understanding.

### Other Relevant Information

From time to time and depending upon the circumstances, we may use third-party service providers to assist us in providing professional services to you. In such circumstances, it may be necessary for us to disclose confidential client information to them. We enter into confidentiality agreements with all third-party service providers and we are satisfied that they have appropriate procedures in place to prevent the unauthorized release of your confidential information to others.

RSM US LLP will be available to support Berberich Trahan & Co., P.A. by rendering services related to the performance of the engagement. If a situation occurs in connection with the proposed engagement for which we would request the services of RSM US LLP, we will notify you and obtain permission from you before giving access to your records. We will maintain supervision, control and ultimate responsibility for the performance of this engagement.

Berberich Trahan & Co., P.A. is independently owned and operated and assumes full responsibility for the quality of service delivered to our clients. We are responsible for our own client fee arrangements and maintenance of our client relationships.

RSM US Alliance provides its members with access to resources of RSM US LLP. RSM US Alliance member firms are separate and independent businesses and legal entities that are responsible for their own acts and omissions, and each are separate and independent from RSM US LLP. RSM US LLP is the U.S. member firm of RSM International, a global network of independent audit, tax and consulting firms. Members of RSM US Alliance have access to RSM International resources through RSM US LLP but are not member firms of RSM US LLP and RSM International. RSM, the RSM logo and RSM US ALLIANCE are trademarks of RSM International Association or RSM US. The services and products provided by RSM US Alliance are proprietary to RSM US LLP.

In accordance with GAS, a copy of our most recent peer review report is enclosed for your information.



### Fees, Costs, and Access to Workpapers

Our fees for the services described above are based upon the value of the services performed and the time required by the individuals assigned to the engagement, plus direct expenses. Our fee estimate and completion of our work is based upon the following criteria:

- a. Anticipated cooperation from City personnel
- b. Timely responses to our inquiries
- c. Timely completion and delivery of client assistance requests
- d. Timely communication of all significant accounting and financial reporting matters
- e. The assumption that unexpected circumstances will not be encountered during the engagement

If any of the aforementioned criteria are not met, then fees may increase. We propose that our fee for this audit engagement, which includes out-of-pocket expenses, will be \$34,000. This fee does not include additional work to be performed if a single audit is required as a result of federal expenditures exceeding \$750,000 in any one year. If a single audit is required, there will be an additional \$2,250 fee for compliance testing and reporting for one major program. If there are additional major programs, our fee for each additional major program will be \$1,500. Our fee for CAFR preparation will be \$2,000. The quoted fee for the year ended June 30, 2019 will be the maximum for the work described in this letter unless the scope of the engagement is changed, the assistance which the City has agreed to furnish is not provided, or unexpected conditions are encountered. No changes will be made in the maximum agreed to amount without discussion with you regarding the proposed change. All other provisions of this letter will survive any fee adjustment. No changes will be made to the fee without discussion with you regarding the proposed change. Interim billings will be submitted as work progresses and as expenses are incurred. Billings are due upon submission.

In accordance with our policy, a finance charge of 1% per month will be applied to balances that are over 60 days old. Payments will be applied first to the accrued finance charges and then to outstanding invoices.

In the event we are requested or authorized by the City or are required by government regulation, subpoena, or other legal process to produce our documents or our personnel as witnesses with respect to our engagement for the City, the City will, so long as we are not a party to the proceeding in which the information is sought, reimburse us for our professional time and expenses, as well as the fees and expenses of our counsel, incurred in responding to such requests.

The documentation for this engagement is the property of Berberich Trahan & Co., P.A. However, you acknowledge and grant your assent that representatives of the cognizant or oversight agency or their designee, other government audit staffs, and the U.S. Government Accountability Office shall have access to the audit documentation upon their request and that we shall maintain the audit documentation for a period of at least three years after the date of the report, or for a longer period if we are requested to do so by the cognizant or oversight agency. Access to requested documentation will be provided under the supervision of Berberich Trahan & Co., P.A. audit personnel and at a location designated by our Firm.

You have informed us that you intend to prepare a comprehensive annual financial report (CAFR) and submit it for evaluation by the Government Finance Officers Association's Certificate of Achievement for Excellence in Financial Reporting. Our association with the CAFR is to consist of assistance with preparation of the CAFR and review the CAFR to insure its readiness for submission.



### Claim Resolution

The City and Berberich Trahan & Co., P.A. agree that no claim arising out of services rendered pursuant to this agreement shall be filed more than two years after the date of the audit report issued by Berberich Trahan & Co., P.A. or the date of this arrangement letter if no report has been issued. In no event shall either party be liable to the other for claims of punitive, consequential, special, or indirect damages. Berberich Trahan & Co., P.A.'s liability for all claims, damages and costs of the City arising from this engagement is limited to the amount of fees paid by the City to Berberich Trahan & Co., P.A. for the services rendered under this arrangement letter.

If any dispute arises among the parties hereto, the parties agree first to try in good faith to settle the dispute by mediation administered by the American Arbitration Association under its Rules for Professional Accounting and Related Services Disputes before resorting to litigation. The costs of any mediation proceeding shall be shared equally by all parties.

The City and Berberich Trahan & Co., P.A. both agree that any dispute over fees charged by Berberich Trahan & Co., P.A. to the City will be submitted for resolution by arbitration in accordance with the Rules for Professional Accounting and Related Services Disputes of the American Arbitration Association. Such arbitration shall be binding and final. In agreeing to arbitration, we both acknowledge that, in the event of a dispute over fees charged by Berberich Trahan & Co., P.A., each of us is giving up the right to have the dispute decided in a court of law before a judge or jury and instead we are accepting the use of arbitration for resolution.

### Information Security - Miscellaneous Terms

Berberich Trahan & Co., P.A. is committed to the safe and confidential treatment of the City's proprietary information. Berberich Trahan & Co., P.A. is required to maintain the confidential treatment of client information in accordance with relevant industry professional standards which govern the provision of services described herein. The City agrees that it will not provide Berberich Trahan & Co., P.A. with any unencrypted electronic confidential or proprietary information, and the parties agree to utilize commercially reasonable measures to maintain the confidentiality of the City's information, including the use of collaborate sites to ensure the safe transfer of data between the parties.

Berberich Trahan & Co., P.A. may terminate this relationship immediately in its sole discretion if Berberich Trahan & Co., P.A. determines that continued performance would result in a violation of law, regulatory requirements, applicable professional standards or Berberich Trahan & Co., P.A.'s client acceptance or retention standards, or if the City is placed on a verified sanctioned entity list or if any director or executive of, or other person closely associated with, the City or its affiliates is placed on a verified sanctioned person list, in each case, including but not limited to lists promulgated by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. State Department, the United Nations Security Council, the European Union or any other relevant sanctioning authority.

If any term or provision of this arrangement letter is determined to be invalid or unenforceable, such term or provision will be deemed stricken and all other terms and provisions will remain in full force and effect.



### Reporting

We will issue a written report upon completion of our audit of the City's financial statements. Our report will be addressed to the City Council of the City. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add an emphasis-of-matter or other-matter paragraph(s), or withdraw from the engagement.

In addition to our report on the City's financial statements, we will also issue the following types of reports:

• A report on the fairness of the presentation of the City's schedule of expenditures of federal awards for the year ending June 30, 2019.

• Reports on internal control related to the financial statements, and major programs. These reports will describe the scope of testing of internal control and the results of our tests of internal controls.

• Reports on compliance with laws, regulations, and the provisions of contracts or grant agreements. We will report on any noncompliance which could have a material effect on the financial statements and any noncompliance which could have a material effect, as defined by Subpart F of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), on each major program.

An accompanying schedule of findings and questioned costs.

This letter constitutes the complete and exclusive statement of agreement between Berberich Trahan & Co., P.A. and the City, superseding all proposals, oral or written, and all other communications, with respect to the terms of the engagement between the parties.

Please sign and return the enclosed copy of this letter to indicate your acknowledgment of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Very truly yours,

BERBERICH TRAHAN & CO., P.A.

Stacey A. Hammond

Director

SAH:tls Enclosures

Confirmed on behalf of the City of Gladstone, Missouri:

Scott Wingerson, City Manager

Date

Dominic Accurso, Director of Finance

Date



A signed copy of this arrangement letter will be forwarded to the following pursuant to Government Auditing Standards Amendment No. 2, "Auditor Communication."

- I. For all financial statement audits performed in accordance with GAS:
  - a. City Council

### **RESOLUTION NO. R-19-49**

A RESOLUTION AUTHORIZING CHANGE ORDER NO. 13 IN THE AMOUNT OF \$156,320.00 TO THE CONTRACT WITH LAN-TEL COMMUNICATIONS SERVICES, INCORPORATED, FOR THE 2019 CURB, GUTTER AND SIDEWALK PROJECT TP1804.

WHEREAS, additional work under the 2019 Curb, Gutter and Sidewalk Project has been determined necessary and is recommended by the Director of Public Works.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, AS FOLLOWS:

**THAT,** the City Manager of the City of Gladstone, Missouri, is hereby authorized to execute Change Order No. 13 to the contract with Lan-Tel Communications Services, Incorporated, TP1804 for the 2019 Curb, Gutter and Sidewalk Project, as follows:

Revised Contract Amount:	\$	741,439.25
Change Order 13	-	156,320.00
Total approved to date:		585,119.25
Change Orders 1 - 12		415,761.75
Original Contract Amount:	\$	169,357.50

**FURTHER, THAT,** funds for such purpose are authorized from the Transportation Sales Tax Fund and will be reimbursed as authorized by Resolution R-19-34.

INTRODUCED, READ, PASSED AND ADOPTED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, THIS 23<sup>rd</sup> DAY OF SEPTEMBER 2019.

ATTEST:	Mayor Carol J. Suter	
Ruth E. Bocchino, City Clerk		



# Request for Council Action

RES ⊠# R-19-49	BILL □# City Clerk	Only ORD	# City Clerk Only
Date: 9/17/2019		Depar	tment: Public Works
Meeting Date Requested: 9/2	3/2019		
Public Hearing: Yes Date	e: Click here to en	ter a date.	
Subject: Change Order 13 to	Project TP1804 for the	2019 Curb, Gutter ar	nd Sidewalk Program
authorized by Resolution 18-	03. Resolution R-19-2 Program. Change Order and sidewalk this fall on	9 modified the scope of 13 further expands the additional streets as post the contract is as follows:	
Budget Discussion: Funds are estimated to be \$ N/A annual	0		the TST Fund. Ongoing costs are
Public/Board/Staff Input: TS' authorized by Resolution R-1		rsed at a later date fro	m the 2020 financing package as
Provide Original Contracts, I	eases, Agreements, etc	. to: City Clerk and V	endor
Timothy A. Nebergall Department Director/Admini	strator	City Attorney	SW City Manager



### **RESOLUTION NO. R-19-50**

A RESOLUTION AUTHORIZING CHANGE ORDER NO. 1 IN THE AMOUNT OF \$242,212.20 TO THE CONTRACT WITH METRO ASPHALT INCORPORATED, FOR THE 2019 MILL AND OVERLAY PROGRAM, PROJECT TP2006.

**WHEREAS**, additional work under the 2019 Mill and Overlay Project has been determined necessary and is recommended by the Director of Public Works.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, AS FOLLOWS:

**THAT,** the City Manager of the City of Gladstone, Missouri, is hereby authorized to execute Change Order No. 1 to the 2019 Mill and Overlay Project TP2006 with Metro Asphalt, Incorporated, as follows:

 Original Contract Amount:
 \$ 877,189.90

 Change Order 1
 242,212.20

 Revised Contract Amount:
 \$ 1,119,402.10

**FURTHER, THAT,** funds for such purpose are authorized from the Transportation Sales Tax Fund and will be reimbursed as authorized by Resolution R-19-34.

INTRODUCED, READ, PASSED AND ADOPTED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, THIS 23<sup>rd</sup> DAY OF SEPTEMBER 2019.

	Mayor Carol J. Suter	
ATTEST:		
	-	
Ruth E. Bocchino, City Clerk		



# Request for Council Action

RES ⊠# R-19-50	BILL □# City Cler	k Only ORI	D # City Clerk Only			
Date: 9/17/2019		Depa	artment: Public Works			
Meeting Date Requested: 9/2	23/2019					
Public Hearing: Yes   Date	te: Click here to e	nter a date.				
Subject: Change Order 1 to	Project TP2006 for the	2019 Mill & Overla	y Program			
Background: The contract for Project TP2006 was awarded to Metro Asphalt, Incorporated as authorized by Resolution R-19-22. Change Order 1 further expands the scope of work to accelerate the mill and overlay of additional streets this fall as part of a City-wide financing package planned for 2020. A financial breakdown of the contract is as follows:  Original Contract Amount:  \$ 877,189.90  Change Order 1  242,212.20  Revised Contract Amount:  \$1,119,402.10  Budget Discussion: Funds are budgeted in the amount of \$ 250,000 from the TST Fund. Ongoing costs are estimated to be \$ N/A annually. Previous years' funding was \$N/A.						
<u>Public/Board/Staff Input:</u> TST Funds will be reimbursed at a later date from the 2020 financing package as authorized by Resolution R-19-34.						
Provide Original Contracts, Leases, Agreements, etc. to: City Clerk and Vendor						
Timothy A. Nebergall Department Director/Admin.	istrator	City Attorney	SW City Manager			



### LETTER OF TRANSMITTAL



# CITY OF GLADSTONE Community Development Department P.O. Box 10719 Gladstone, Missouri 64188-0719 Tel. (816) 436-2220 Fax (816) 436-2228



To: CITY COUNCIL

FROM: COMMUNITY DEVELOPMENT

DATE: SEPTEMBER 9, 2019

PERMIT No.: BP-19-00751

RE: Type 4 Outdoor Special Event

NAME OF EVENT: IWERX PROMOTIONAL EVENT

LOCATION OF EVENT: 602 NE 70<sup>th</sup> street

**LINDEN SQUARE** 

DATE OF EVENT: SUNDAY, SEPTEMBER 29, 2019

TIME OF EVENT: 2:00PM - 10:00PM

EST. ATTENDANCE: 1,500

REC	OUESTED	TEMPORAR	v V	ARIANCE
IVE	UUESIED	I CIVIF ORAL	VI V	ANIMICE

[X]	Section 2.120.050 Noise prohibited.
[X]	Section 2.130.010(2) Park rules and regulations (hours).
[X]	Section 2.130.010(13) Park rules and regulations (alcoholic beverages).
[X]	Section 2.135.040 Prohibition of smoking on or within all public park grounds.
[ ]	Section 2.140.040 Public fireworks display prohibited, exceptions.
[X]	Section 5.110.1800 Drinking in public.
[ ]	Section 5.160.230(a) Street use permit (street use permit allowed).
[X]	Section 9.1600.110 Temporary signs.
	Other – Section
[ ]	Other – Section

REMARKS: iWerx Gladstone is hosting a musical event, promoting local business. City staff has reviewed the application and find that the requested variance are appropriate for this venue.

Alan D. Napoli, C.B.O.

Community Development Administrator / Building Official

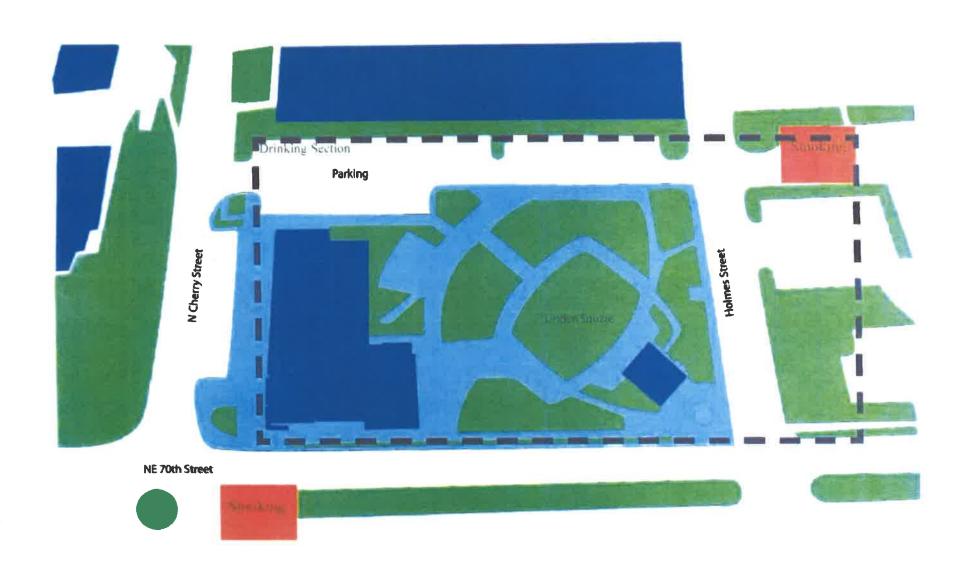
ATTACHMENT(s):

	( )			
[X] Map				
[ ] Other				



# Request for Council Action

RES # City Clerk Only	BILL # City Clerk Only	ORD # City Clerk Only				
Date: 9/9/2019	Department	: Community Development				
Meeting Date Requested:						
Public Hearing: Yes   Date: Clic	k here to enter a date.					
Subject: Outdoor Special Event Perr	nit					
Background: iWerx Gladstone will be Sunday, September 29th from 2:00pm wishes to connect with the City of Glad of Nashville, Tennessee; more information of honkytonk, rockabilly, psychobilly,	<ul> <li>10:00pm. This event is free to all be distone. The band performing for this ation on them can be found at "hillbil</li> </ul>	businesses, residents, and anyone who event is called Hillbilly Casino out				
Budget Discussion: Funds are budgeted in the amount of \$ 0.00 from the N/A Fund. Ongoing costs are estimated to be \$ 0.00 annually. Previous years' funding was \$0.00						
Public/Board/Staff Input: See attached	d letter of transmittal					
Provide Original Contracts, Leases, A	Agreements, etc. to: City Clerk and	Vendor				
Alan Napoli Community Development Administra	ator / Building Official					





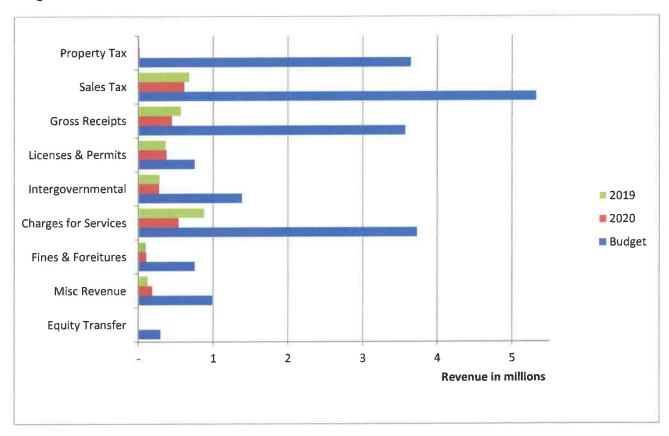
## CITY OF GLADSTONE MISSOURI

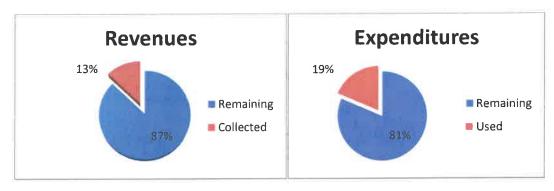
Financial Report for 2 months Ending August 31, 2019

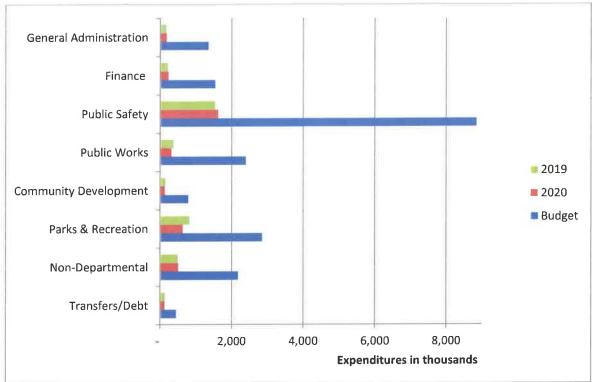
#### **GENERAL FUND**

#### **General Fund Revenues**

Total revenues for the General Fund through 2 months or 17% of this fiscal year are \$2,604,526 compared to total budgeted revenues for the year of \$20,459,600. Property tax receipts are \$21,326, an increase of \$3,942 from last year. Sales tax on a cash basis is \$619,662 or \$62,192 less than the same time last year due to the decrease in vehicle sales tax and late remittance. Gross receipts taxes are \$455,143, down 20% or \$117,287 from last year, mainly due to a decrease in electric gross receipts and decreasing telecom and wireless receipts. License and Permits revenues are \$383,406, up 4% or \$15,397 from the same time as last year due to building and right of way permits being issued. Intergovernmental revenue has decreased by \$4,874 from the previous year to \$281,691. Charges for Services are 543,010, down 38% or \$339,672 compared to the previous year due to multiple large overnight senior trips in the 2019 fiscal year. Fines and Forfeitures have increased 8% from the same time last year to 109,233. Miscellaneous Revenue is \$191,056, up 50% due to rental of downtown buildings.



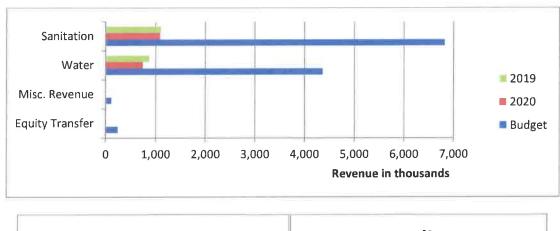


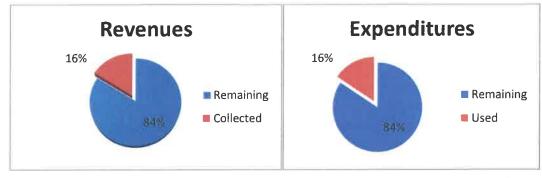


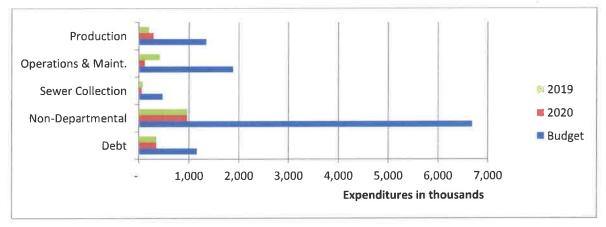
Expenditures through 2 months or 17% of this fiscal year amounted to \$3,793,714 or 19% of FY20 budgeted expenditures of \$20,450,275. This indicates that actual expenditures are 2% or \$96,433 less than last year's expenditures of \$3,890,147. General Administration expenditures increased \$17,302 or 10% from last year for a total of \$185,679 due to personnel costs. Finance expenditures are up 10% to \$237,520 due to the timing of software maintenance invoice. Public Safety expenditures are \$1,629,440, up \$88,903 or 6% due to increased personnel costs. Public Works expenditures have decreased to \$318,373 or 14% due to open positions. Community Development expenditures are \$137,216, a decrease of 7% or \$10,908 due to the timing of contractual obligations and changes in personnel. Parks & Recreation expenditures are \$638,928, down 22% or \$179,080 from the same time last year due to decreases in Senior Activities. Non-Departmental increased \$17,373 to \$511,351 due to increases in downtown development agreement expenses and insurance cost. Transfers and debt are comparable to the prior year. Current expenditures are greater than revenues in the amount of \$1,189,187. This is due to the City's full year insurance premium and debt payments being due in July, while the bulk of the property taxes will not come in until January.

#### COMBINED WATER AND SEWERAGE SYSTEM FUND

Total budgeted revenues for the fiscal year are \$11,564,905. Total revenues through 2 months or 17% of this fiscal year, amounted to \$1,856,109 or 16% of FY20 budgeted revenues. Revenues are down 7% or \$138,355 from last year due to decreased water and sewer consumption.

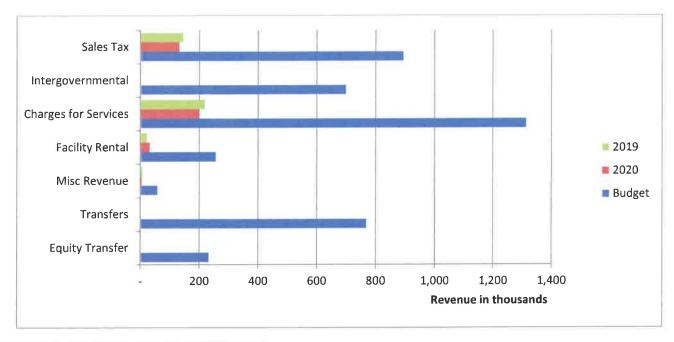


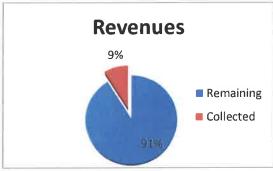




Total budgeted expenses for the fiscal year are \$11,561,656. Total expenses through 2 months or 17% of this fiscal year amounted to \$1,807,461 or 16% of FY20 budgeted expenses. Production expenditures are up \$89,599 to \$297,181 due to additional lime sludge maintenance. Operations division expenditures are \$126,111, down 27%, or \$290,452 due to the timing of water line replacements. Sewer division expenditures are down 27% or \$9,099 due to the timing of sewer line replacements. Non-departmental is down 14% due to a decrease in sewer usage. Debt payments are comparable to the prior year. Current revenue exceeds current expense by \$48,648.

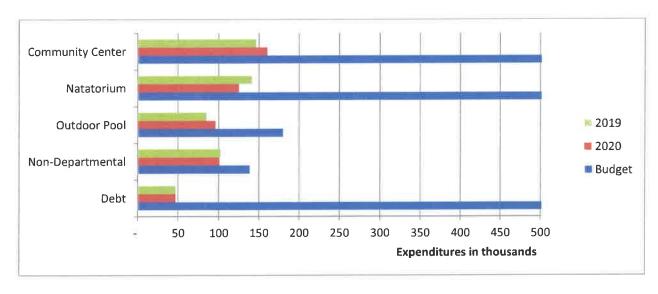
#### COMMUNITY CENTER AND PARKS TAX FUND

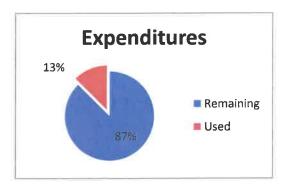




made throughout the fiscal year.

Total budgeted revenues for the fiscal year are \$4,223,765. Total revenues through 2 months or 17% of this fiscal year, amounted to \$372,564 or 9% of FY20 budgeted revenues. Sales tax received is \$133,380, down 8% or \$12,361 from the previous year. Payment from the North Kansas City School District usually occurs in January. Charges for Service are \$201,013, down 8% or \$17,737. Revenue from facility rental is \$32,743, up \$9,957 due to increased facility and pool rental. Miscellaneous revenue is comparable to the prior year. Operating and debt transfers will be

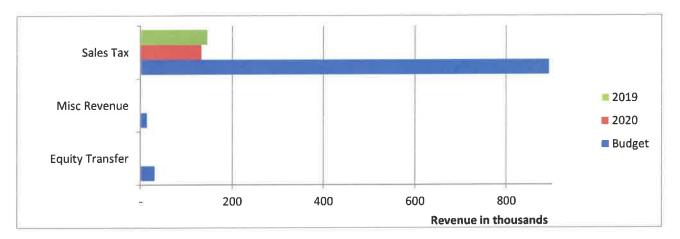




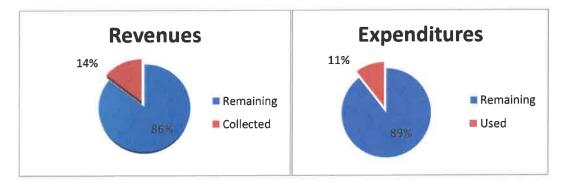
revenue by \$157,944.

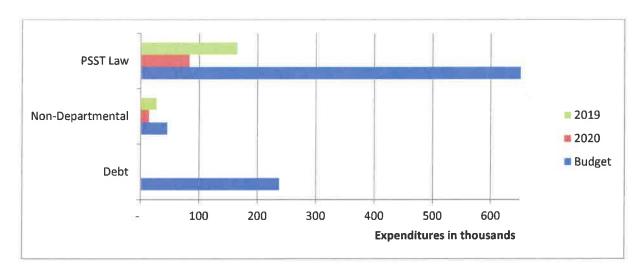
Total budgeted expenditures for the fiscal year are \$4,223,765. Total expenses through 2 months or 17% of this fiscal year, amounted to \$530,507 or 13% of FY20 budgeted expenses. Community Center expenses have increased 10% from the same time last year to \$160,745 due to personnel. The Natatorium expenses are \$125,248, down \$15,956 from the same time last year due to the timing of capital purchases. Outdoor Pool expenses are up 14% to \$96,249 due to personnel. Non-departmental and debt are comparable to the prior year. Current expense exceeds current

#### PUBLIC SAFETY SALES TAX FUND



Total budgeted revenues for the fiscal year are \$940,228. Total revenues through 2 months or 17% of this fiscal year amounted to \$134,438 or 14% of FY20 budgeted revenues. Sales tax on a cash basis is down 15%. Miscellaneous revenue is comparable to the previous year.





Total budgeted expenditures for the fiscal year are \$940,228. Total expenses through 2 months or 17% of this fiscal year are \$98,826 or 11% of the FY20 budgeted expenses. Law division is down 49% due to personnel and the timing of capital purchases. Non-Departmental is \$15,063, down \$12,629 due to the timing of equipment maintenance. Payments for debt are comparable to the prior year. Current revenues are greater than current expenditures. Net income on a cash basis is \$35,611.

Respectfully submitted,

in Change

Dominic Accurso

Director of Finance

#### **RESOLUTION NO. 19-51**

A RESOLUTION AUTHORIZING ACCEPTANCE OF A PROPOSAL FROM SUPERION L.L.C., A SUBSIDIARY OF SQUARE TECHNOLOGIES, LAKE MARY, FLORIDA, FOR THE PURCHASE OF PUBLIC ADMINISTRATION SOFTWARE FOR THE TOTAL PURCHASE AMOUNT OF \$373,814.20.

WHEREAS, software designed for public administration (budgeting, accounting, utility billing, citizen engagement, licensing, code enforcement, permitting, and ancillary systems) were evaluated; and

WHEREAS, the Central Square Technologies software far exceeded the capabilities of other products evaluated.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI, AS FOLLOWS:

**THAT**, the City Manager of the City of Gladstone, Missouri, be and is hereby authorized to accept the proposal from Superion, a Central Square Technologies Company, for the purchase amount of \$373,814.20.

Public Administration Software and ancillary systems - TOTAL COST: \$373,814.20

FURTHER, THAT, funds for such purpose are authorized from the General Fund.

INTRODUCED, READ, PASSED, AND ADOPTED BY THE COUNCIL OF THE CITY OF GLADSTONE, MISSOURI THIS 23<sup>rd</sup> DAY OF SEPTEMER 2019.

	Mayor Carol J. Suter
ATTEST:	
Ruth E. Bocchino	=



# Request for Council Action

RES ⊠# R-19-51	BILL □# City Clerk	« Only	ORD # City Clerk Only
Date: 9/17/2019			Department: Finance
Meeting Date Requested: 9/2	3/2019		
Public Hearing: Yes Date	e: Click here to en	ter a date.	
Subject: Public Administrati	on Software		
Background: Staff has been re Community Development. Me			accounting/budgeting, utility billing, and
Budget Discussion: Funds are Purchase Fund. Ongoing of annually. Previous years' fund	costs are estimated to b	e \$ 31,415 with	4.20 from the 2019 Security Bank Lea h a 3% yearly escalation for 10 years, ion
Public/Board/Staff Input: Me	mo, contracts, and resol	ution to follow	
Provide Original Contracts, I	eases, Agreements, etc	<u>z. to:</u> City Clerk	k and Vendor
Dominic Accurso Department Director/Admini	strator	City Attorney	SW City Manager



### Department of Finance Memorandum

**DATE:** September 18, 2019

**TO:** Scott Wingerson – City Manager

**FROM:** Dominic Accurso – Director of Finance

**RE:** Municipal Software

At the September 9<sup>th</sup> City Council Open Study Session, Central Square Technologies gave a short presentation on how their citizen engagement portal could help the City as well as the stakeholders of the City of Gladstone. The software would give the City the option to have reoccurring utility billing payments, pay for one or several permits, pay multiple utility bills (or just check on the history), report a code violation, or report other issues that needed attention.

Staff has been researching new software for the accounting/budgeting, utility billing, and community development functions for about two years. We have talked with other cities to see what they are using and how they are using their software. We have also had numerous demonstrations from companies in that same time frame.

Since the study session, staff has made site visits to see how the cities are using the software to accomplish their goals. The Village of Hoffman Estates was very happy to let Senior Accountant Ryan Johnston and I observe several of the financial accounting functions. They took us through a monthly bank reconciliation, walked through their purchasing process, observed peard uploads, and created financial reports that were improvements from our current software. We also were able to observe how their workflow works and internal controls provided by the software.

Community Development Administrator and I visited the city of Coral Springs to observe how they used the Community Development portion of the software. Alan observed how code enforcement conducts inspections, closing out a case in the field, creating a new case in the field, and citizen access on an IPad. The process was very unique as the software will take your cases for the day and place them in an order for inspection on an aerial map. This order can be changed or not followed if need be. What was distinctive is that all you had to do was touch the dot on the iPad for the location and the case would popup on the screen. We were also able to observe the licensing process, and how businesses were submitting applications online with attachments.

The ability to start water service without visiting City Hall is not a function of the software. Residents are asked to come into City Hall to start water service to have some level of assurance of who is receiving the service. Residents are required to have a photo ID and a copy of the lease if the property is a rental. Staff is researching how policy and procedure could be changed to not require a physical visit to City Hall to start service, and will be presented to Council at a future study session. Another question asked by the Council was how current users would be notified about the change. Staff will work with Central Square to create a plan to ensure that all current users of Citizen Access are aware of the software change and do everything possible to assist in getting residents set up in the new software.

One of the greatest considerations of purchasing the software is cost. The greatest part of the cost of the software comes from the set-up, data conversion, and training. Total implementation costs are expected to be \$373,814.20 and will be paid as the implementation process occurs (estimated 9 to 12 months). Staff has negotiated the annual price escalation from 5% to 3% for 10 years, saving \$34,000 from price escalation alone. The annual fee for the software will be between \$20,000 and \$25,000 less per year than the current software we are using, recovering over 60% of the implementation costs.

Staff is recommending that the City enter into an agreement with Central Square Technologies for public administration software. The software is a vast improvement over the current software being used.

AN ORDINANCE DIRECTING THE CITY MANAGER TO PARTICIPATE TRANSPORTATION **MISSOURI HIGHWAYS** AND IN THE COMMISSION BLUEPRINT FOR SAFER ROADWAYS PROGRAM AND SIGN AN AGREEMENT WITH THE COMMISSION TO UTILIZE STATE ROAD FUNDS IN AN AMOUNT OF NO MORE THAN \$6,007.00 FOR THE PURCHASE OF RADAR SPEED THE CITY SIGNS FOR GLADSTONE.

#### LEGISLATIVE FINDINGS

1. The City of Gladstone and the Missouri Highways and Transportation Commission seek to promote safety on roadways.

2. The Commission has authorized State Road Funds to be used to support the regional

Blueprint for Safer Roadways.

3. State Road Funds, which are the subject of the agreement with the Missouri Highway and Transportation Commission, will support Missouri's Blueprint for Safer Roadways through the acquisition of traffic calming equipment for school zones and reimburse eligible costs in the amount of no more than \$6,007.00.

4. Executing an agreement with Missouri Highways and Transportation Commission to participate in the Blueprint for Safer Roadways Program is in the best interests of the

residents of the City of Gladstone.

#### NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF GLADSTONE, MISSOURI AS FOLLOWS:

1. The City of Gladstone agrees to participate in Missouri's Regional Blueprint for Safer Roadways Program.

2. The City Manager is authorized to sign the Missouri Highways and Transportation Commission Blueprint for Safer Roadways Program agreement.

OF GLADSTONE, MISSOURI THIS 23	DAY OF SEPTEMBER, 2019.
	Mayor Carol J. Suter
ATTEST:	
Ruth Bocchino, City Clerk	
FIRST READING: September 23, 2019	SECOND READING: September 23, 2019



## Request for Council Action

RES □#	BILL ⊠# 19-40	ORD # 4.491	
Date: 9/13/2019		Departme	ent: Public Safety
Meeting Date Requeste	ed: 09/23/2019		
Public Hearing: Yes	Date: Click here to er	nter a date.	
Subject: Missouri High Agreement.	hways and Transportation Co	ommission Blueprint for S	Safer Roadways Program
provide funding to supp	ouri Highways and Transporta out the program. The City of equipment (radar speed signs)	Gladstone was awarded a g	nt for Safer Roadways Programs grant through this program to sount not to exceed \$6,007.00.
	nds are budgeted in the amou nnually. Previous years' fund		Fund. Ongoing costs are
Public/Board/Staff Inpu	ut: Staff recommends authoriz	ing the agreement.	
Provide Original Contr	racts, Leases, Agreements, et	c. to: City Clerk and Vend	dor
Department Director/A Chief Michael J. Hasty Director of Public Safe	7	City Attorney	<b>SW</b> City Manager

## GLADSTONE PLANNING COMMISSION AMENDED MINUTES

Council Chambers August 19, 2019

1. Meeting called to Order-Roll Call. Chair McGee called the meeting to order at 7:00 p.m.

Commissioners present were:

Chase Cookson
Mike Ebenroth
J.N. Hernandez
Alicia Hommon
Gary Markenson
Katie Middleton
Kim Murch
James New
Bill Turnage
Larry Whitton

Jennifer McGee, Chair

Also present:

Jean Moore, Mayor Pro Tem Scott Wingerson, City Manager Bob Baer, Assistant City Manager

Alan Napoli, Building Official/Com Dev Administrator

Austin Greer, Assistant to the City Manager/Planning Administrator

Cheryl Lamb, Administrative Assistant

- 2. Pledge of Allegiance to the United States of America.
- 3. Approval of Previous Meeting Minutes: August 5, 2019. Chair McGee asked if there was a motion to approve the minutes from the August 5, 2019 meeting. Mr. Murch moved to approve the minutes; Ms. Hommon seconded. The minutes were approved, 12-0.
- 4. Other Business. None.
- 5. Public Hearing: Site Plan Revision, 6221 N Chestnut Avenue, File #2019-008.

"The minutes were taken by Cross Reporting for this meeting."

MOTION: By Mr. Markenson, seconded by Mr. Whitton, to approve the Site Plan Revision, 6221 N Chestnut Avenue, File #2019-008. The motion carried 9-3 (1-no, 2-abstain).

- 6. Communications from City Council. None.
- 7. Communications from City Staff. None.
- 8. Communications from Planning Commission Members. None.
- 9. Adjournment. Ms. Hommon motioned to adjourn; Mr. Murch seconded.

Chair McGee adjourned the meeting at 7:24 p.m.

# PLANNING COMMISSION MEETING - August 19, 2019 CITY OF GLADSTONE, MISSOURI

## Cross Reporting Service

Certified Court Reporters

(816) 252-8883

306 S.E. 291 Highway - Suite 5
Lee's Summit, Missouri 64063
Fax (816) 252-7044
Toll Free (877) 252-8883
www.kansascity-courtreporter.com
crossreporting@sbcglobal.net

1	GLADSTONE PLANNING COMMISSION HEARING	1	not a re-zoning of the property. The current zoning of this
2			property is CP-3 and is zoned for this proposed use.
3	Monday, August 19, 2019	3	The site plan shows additional trees and landscaping
4			being planted on the eastern side of the property located
5		5	directly behind the proposed convenience store and gas
6	Appearances:	6	station creating the required 35 feet buffer zone between the
7	Mayor Pro Tem Moore	7	subject commercial and residential properties. There is also
8	Commissioner Cookson	8	proposed landscaping on the western side of the property near
9	Commissioner Ebenrath	9	the planned monument sign and green space between the two
0	Commissioner Hernandez	10	egress and ingress access points on North Chestnut Avenue.
11	Commissioner Hommon	11	City Staff recommends the trees and shrubs being planted on
1.2	Commissioner Markenson	12	the property be native to Missouri by nature in an effort to
13	Commissioner Middleton	13	aid in better streetscape and survival.
14	Commissioner Murch	14	In the BMP analysis conducted by Kaw Valley
1.5	Commissioner New		Engineering, runoff drains towards the southwest corner of
lG	Commissioner Turnage	15	the property and a bio-swale will be implemented to treat and
17	Commissioner Whitton	16	the property and a olo-swale will be implemented to treat and
18	Chair McGee	17	capture runoff from the fueling area prior to runoff exiting
19	CD Administrator/Building Official Alan Napuli	18	the site.
0 (	Assistant to the City Manager Austin Green	19	The large mechanical equipment for this project is
21	Recording Secretary Cheryl Lamb	20	being relocated from the roof of the building to the ground
2 2		21	and will be adequately screened from public view with
23	NICOLE M. CALCARA, C.C.R.	22	materials similar in design to the rest of the structure.
	for	23	All screening will be reviewed via the building permit
24	CROSS REPORTING SERVICE, INC.	24	process.
25		25	Included in the Planning Commission packet is a
	Page 2		Page (
	CHAIR MCGEE: I now call the Planning	1	letter from World Fuel Services describing the experience of
2	Commission of Monday, August 19th, meeting to order.	2	Amir Nadeem Mehdi, who will be the store operator for the
3	(Roll called.)	3	proposed gas station and convenience store. Staff has also
4	(Pledge of Allegiance.)	4	included a retail mystery shop for the proposed operator for
5	CHAIR MCGEE: The next item on the agenda is	5	their various other locations.
6	the approval of the previous meeting minutes. Are there any	6	There are residents located to the east of the
7	corrections for the minutes or would someone like to make a	7	subject property that are opposed to this particular project.
8	motion to approve them as read?	8	The Community Development Department has received multiple
9	(Motion made, seconded and carried.)	()	phone calls and a signed letter from the Woodlands HOA Board
10	CHAIR MCGEE: The minutes stand as approved.	]()	in opposition to this project in 2018 and 2019.
11	The next item is any other business.	11	In 2018 Mr. Charles Cuda submitted a letter
12		12	regarding issues and concerns of both the residents and the
13	CHAIR MCGEE: Okay. Item No. 5 is a public	13	
	hearing for a site plan revision of 6221 North Chestnut	14	
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	known as Tanner's Restaurant. Their plan is to significantly	21	
21		22	
21 22		~ ~	
20 21 22 23	retrofit the property using a combination of EIFS stone.	23	
21 22	retrolit the property using a combination of EIFS stone.	24	

Page 7 Page 5 1 applicant like to make a presentation? choose to approve this project. MR. BOWERS: Yes. 2 2 Request Number 1, any and all disturbed areas shall CHAIR MCGEE: State your name and address, 3 3 be sodded. MR. BOWERS: Madam chair, members of the commission, Number 2, all manicured grass and landscaped areas 4 4 my name is Jim Bowers. I'm a lawyer with Rouse Frets White shall be maintained in perpetuity. 5 Goss. We have offices at 4510 Belleview. Kansas City, Number 3, all mechanical equipment located on the 6 Missouri. Here today on behalf of Chuck Cuda and his roof and the ground shall be screened from public view 7 company. Pauch, LLC, the developer of this project. As similar in design to the rest of the structure. All 8 housekeeping matter I would like to confirm Staff's report screening will be reviewed via the building permit process. 9 that we have agreed to all 15 of the Staff's conditions. Number 4, a compliant monument sign shall be used to 10 10 serve the development. The monument sign will need a minimum With me today in addition to Mr. Cuda are the project 11 architect. Mr. Brian Ruoff, and to my left Melissa Van Trump, of 240 square feet of area landscaping around the sign. 12 12 who is my associate. We'll be available to answer any Number 5, relocation of the trash dumpster to the 13 questions you have at the conclusion of my presentation. northwest corner of the parking lot away from the residential 14 14 Also during my presentation the architectural area adjacent to the property. 115 15 drawings prepared by Mr. Ruoff will be explained by him. Number 6, all exterior lighting on the site shall be 16 16 This is a request to approve a site plan. As Staff told you LED and designed to reduce adverse impact on adjoining 17 17 the property is zoned CP-3. CP-3 permits a gasoline station 18 18 residential properties. and a convenience store. So it's permitted use in the zoning Number 7, outdoor lighting cannot be greater than 19 district in which we are located. The question is whether or 0.25 foot eandle with 10 feet beyond property line. 20 not this site plan should be approved. And the zoning Number 8, dumpster shall be enclosed with materials 21 21 requirements are that in certain situations a site plan consistent with primary building. Specific colors shall be 22 22 review is appropriate, and we'll get into those circumstances submitted and approved as part of the building permit. 23 in just a moment. But this property was formerly occupied Number 9, Trash service, store deliveries, gasoline 24 and operated by Tanner's Bar. That project closed a number refilling, underground commercial gasoline tanks, shall occur Page 6 I of months ago and this is a re-use of that property, try to between hours of 7 and 10:00 p.m. 1 put it back into some commercial use consistent with the 2 Number 10, tractor/trailers, storage containers and 2 zoning. You will recall I believe that most of you, that a other commercial vehicles including delivery trucks shall not 3 3 similar case was heard by you and by the City Council in 2018 be parked or stored overnight on the premises. 4 that was ultimately denied by the City Council. This is the Number 11, no more than 50 percent of the glazed 5 same property, the same developer, same proposed use, but the area of the building shall have signage. 6 site plan and the approach is different. And for that reason Number 12, hours of operation are from 5:00 a.m. 7 we believe this project is entitled to your recommendation through 2:00 a.m. the store will be closed from 2:00 a.m. 8 and the City Council's approval. We'll get into those a through 5:00 a.m., Monday through Sunday. 9 10 little later. Number 13, signage compliant with the sign code 10 What I didn't mention is the neighboring uses to the shall be used. Signage shall be approved at the time of 11 11 north, south, and west of this site are commercial. The only 17 12 permitting residential use adjacent to our property is to the east. The 13 Number 14, construct and maintain in perpetuity a 13 Woodlands neighborhood. This is an aerial photograph of the six foot PVC privacy fence, earth tone in color, along 14 site outlined in vellow. And you will see that to the north 15 eastern property line. of us, to the south of us and to the west are commercial Number 15, maintain growth between the commercial 16 uses. The Woodlands neighborhood is located in this area to 17 privacy fence and the residential privacy fence in the cast. This is the time line when you-all considered this 18 project in 2018 leading up to your consideration tonight. the developer has agreed to all recommended 19 August 19th, of the new proposed plan. Mr. Cuda is an 2() 20 conditions. City Staff recommends that the request be experienced developer. This isn't his first endeavor. He approved contingent upon the conditions listed above. The has developed neighborhood retail shopping centers in the date and time is scheduled Monday. September 9th, 2019, at Kansas City metropolitan area including Country Club shops. 7:30 p.m. at the regular City Council meeting. Thank you and 23 23 24 Foxwood shops, Quality Plaza, all of these projects have that is all. Madam chairperson. 24 25 remants that are local retail tenants. This slide shows the CHAIR MCGEE: Thank you, Would the 25

- 1 regulations that allow this use in a CP-3 district. And what
- 2 it starts out with is an observation that shops and stores
- 3 for the sale of food and beverage are first permitted in C-1.
- 4 C-1 uses are accumulated into the C-2 category and in C-2 the
- 5 dispensing of petroleum products is permitted for the first
- 6 time. In C-3, which is the district we are in, it
- 7 accumulates the uses allowed in C-1 and C-2, and that is how
- 8 we get to the conclusion that this use is permitted in C-3.
- 9 You will also see that the very last regulation mentioned on
- 10 the site says that the uses that are permitted in C-3 shall
- 11 be the same uses permitted in planned C-3. And we are a
- 12 planned C-3 district. This slide shows the regulations that
- 13 require a site plan in this case and what triggers the
- 14 requirement, is any situation in which the square footage of
- 15 the items for sale outside the premises is greater than the
- 16 square footage of items for sale inside the premises. Or, in
- 17 the alternative, if the proceeds from the sale of products
- 18 outside exceeds 50 percent of the gross income of the entire
- 19 project, this site plan review is required. Staff in this
- 20 case considered we met those criteria. This is a copy of the
- 21 zoning map. The star locates where this proposed project is.
- 22 And you see the red with the hatch mark represents the CP-3
- 23 zoning classification. The red area immediately to the north
- 23 Zonning classification. The red area infinediately to the north
- of us is C-3, without the plan requirement, and the property to the east obviously in yellow is residential, the Woodlands
  - to the east obviously in yellow is residential, the Woodlands

- Page 11
  1 So we are proposing to take all the rooftop units off the
  - 2 building. The units that are now in the proposed units would
  - 3 all be removed from the roof. You can also see in this site
  - 4 plan because of all the landscaping we are adding to the east
  - 5 of the property, and I'll go through that when we get to the
  - 6 color version, we are proposing the fence to be 15 feet off
  - 7 the back of the existing fence to allow for practical
  - 8 implication of landscaping. These are similar elevations to
  - 9 what was proposed before. At that time we had a little bit
  - 10 higher parapet running around the building, because removing
  - 11 all of the equipment, and that is the existing parapet on the
  - 12 building, so this would be essentially a re-face of the
  - 13 building that would be there minus the front 20 feet. You
  - 14 can also see in this view that the lower part of the front of
  - 15 this would be a stone veneer. The process we've been through
  - 16 the last eight or nine months has been adding landscaping, so
  - 17 this depicts a fairly extensive -- it is a loaded east side.
  - 18 We've put in as many trees as we feel will physically be able
  - 19 to grow and exist long term. So we have a row of evergreen
  - 20 trees. I'll show you a -- I'll go straight to that. So we
  - 21 are proposing the trees in the picture in the lower left
  - 22 corner, very large tall evergreen trees, they would be along
  - 23 that entire back fence line. You can see the lower expanded
  - 24 version. And in front of those we would have eastern
  - 25 redbuds, which would be more of a broad -- those would be

#### Page 10

- 1 Neighborhood Association. This slide shows a photograph of
- 2 the building, current building looking from the west side of
- 3 the street directly east, and you see in the background the
- 4 fence between the subject property and the Woodlands
- 5 neighborhood. And the photograph at the bottom of the slide
- 6 is a southeast orientation, so you are looking southeast at
- 7 the building. This is coming from the other direction. This
- 8 is southwest. And, finally, this is the back side of the
- 9 building and the fence between the Woodlands neighborhood to10 the east and our property.

With that, I'm going to ask Mr. Ruoff to come up and go through the architectural drawings.

MR. RUOFF: Some changes have been made to the site.

I'm going to go through those. Most of the people in this room are probably familiar with this project, but I'll back

15 room are probably familiar with this project, but I'll b 16 up for those who aren't. The proposed changes to the

13

47 existing building, you can see the dashed line to the front

18 of the building, we are proposing to remove 20 feet of the

- 9 existing building. If you've been in the building it is the
- 20 bar area. We are proposing to remove that part of the
- building and build a new facade to the existing buildings.
   Part of the discussions that occurred last year were rooftop.
- 23 screening and equipment on the roof that are existing now.
- 24 And the issues of going back and screening that became
- 25 impractical as far as the existing joists in the building.

- Page 12

  I deciduous tree. And you can see where those line up in the
- 2 front as space allows. And then we are using basically a
- 3 skyrocket Juniper in the upper right corner. Those are
- 4 smaller taller evergreen trees you normally find around trash 5 enclosures, but we are going to use those to fill in
- 6 landscaping gaps. You can see those long the equipment fence
- 7 at the very bottom of the picture. So this is a color
- 8 version of it. What you see in green is grass, the light
- 9 green. And then the trees I just described are along that
- 10 eastern edge. Then there is paving being removed
- 11 extensively. That whole east side right now is paved and
- 12 that is all being removed and landscaped. So there is a
- 13 front view. This will be a spring version, that would be the
- 14 eastern redbuds when they are in bloom. But that -- we put
- 15 those in there that way to show the depth. Because if we had
- 16 green on green it would be harder to depict the depth of the17 project. But there are two layers of trees going on in this.
- 18 Then finally the photo metrics plan this is a slight tweak to
- 19 the version we had a year ago, but, and it is hard to tell.
- 20 but we have zero, zero foot eandles at the eastern property
- 21 line at the actual property line all across the eastern
- 22 edge. And it is actually that way all around the site except
- 23 for the trash enclosure where we run into what Wendy's is
- 24 doing Probably there is going to be some overlap there.
- 25 Because of the less than point one on the property line it.

I will probably be a little more. But the eastern edge is

- 2 protected. And this is without the landscaping. The
- landscaping would even filter that light even further. So
- I'm not concerned about that being an issue at all, but I am 4
- willing to answer any questions on that. Any questions for 5 me while I'm up here? 6

MR. MARKENSON: You said it clearly, but I want to 7 see if I understood it, the 20 feet that is coming off that 8

9 is the front of the building?

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MR. RUOFF: Correct. There is actually a beam line inside and we are going to that beam line where structurally it makes sense.

CHAIR MCGEE: Can we hold the rest of the 13 Commission questions until the end? Thank you. 14

MR. BOWERS: Thank you, Brian. Next issue is storm water. There have been certain comments made to us by the neighbors about their understanding that storm water runs off from our property onto their property to the east. And our

professional civil engineer, Kaw Valley Engineering went out 19 and took a look at this and they have a conclusion based upon 20 20

- solid scientific analysis that water does not run uphill. 21
- And uphill is the property to the east. We are downhill from 22
- the eastern neighborhood. Our proposed project will actually 23
- decrease the impervious surface and reduce overall site
- 25 runoff. There are parts of the property that are covered
  - Page 14

1

1 with asphalt that will not be when we are done with this

- 2 project. No on-site detention is required based on the
- 3 engineer's analysis. We are building bio-swales to capture
- 4 water that runs off the property that will filter, act as a
- 5 bio-filter of the property to the extent there are any
- 6 residual petroleum distillates in the run-off from the
- 7 asphalt parking lot. They will be filtered by the bio-swale
- 8 on the west side of the property before entering the general
- 9 storm water system. So we believe that will more than
- 10 adequately protect the environment.

Traffic, the traffic report that was part of the

- 19 -- 2018 application dealt with the analysis of this use 12
- versus the prior historic uses and concluded that there will 13
- 14 be no traffic impact with this use that exceeds the traffic
- 15 impact that had occurred previously. As we indicated, there
- 16 was a neighborhood meeting June 24th at the Mid-Continent
- 17 Public Library. There were nine Woodland homeowners present.
- 18 And their homes were as close as Mr and Mrs. Clymore's
- 19 property, which is about 75 feet to the east, and as far away
- 20 as Mrs. Vandever's property, which is 1500 feet away. Those
- 21 homes are shown on this map with yellow dots. Those yellow
- 22 dots indicate where those nine property owners live. And
- 23 again, our property is the star right there. The issues they
- 24 raised were security, lighting, noise, health and
- 25 environment. With respect to security, the operating hours

Page 15 as Staff pointed out will be limited to 5:00 a.m. to 2:00

- a.m. The store will be closed between those hours of 2:00 2
- a.m in the morning and 5 a.m. Looking at the literature 3
- concerning crime related to convenience stores, the Number 1 4
- factor in determining the likelihood of crime, including 5
- robbery, occurring in a convenience store is hours of 6
- operation. And the likelihood of a 24-hour facility that is 7
- open all night into the next morning is much greater than a
- similar crime occurring at a facility that doesn't stay open
- all night. The other interesting thing about the literature 10
- is that a convenience store that sells gas is less likely to 11
- be the focus of a criminal endeavor. That is what the
- 13 statistics show. So having gas pumps at a convenience store
  - lessens the likelihood of crime. In addition to the
- operating hours, the layout of the store is very important. 15
- And so the layout of the store will allow persons outside the
- store to see in the store. The shelving in the store will 17
- allow people outside the store to see the cash register. Those things, according to the literature, very important in 19
- minimizing the likelihood that this convenience store would
- be the subject of a criminal attempt. 21

In addition to that, finally we are going to have 22

- security cameras placed at strategic locations throughout the 23
- facility and on the property which will be operating 24/7 24
- with back-up tapes to allow us to observe anything that is

  - going on and cooperate with local law enforcement officials
- to the extent such cooperation is appropriate, because of the 2
- activity. So we think the security issue has been addressed 3
- by this. Lighting, as our architect Mr. Ruoff just told you,
- the lighting plan shows zero foot candles at the property 5
- boundary line. In addition to that, we will be using LED
- lighting, which generally speaking is a less intrusive type 7
- of lighting that doesn't have fugitive light running off the
- property: And the Staff has suggested -- not suggested, but
- required as conditions 6 and 7 that the lighting issue be
- addressed. And we, of course, are complying with Staff's 1.1
- 12 request.

13 Noise, the concerns were traffic, deliveries, hours of operation, dumpsters. Those were the issues raised at the 1.

neighborhood meeting. First of all, we will comply with the

City's noise ordinance. Chapter 120 of the local code as a

provision which prevents commercial properties adjacent to 17

residential properties from conducting any unreasonably loud and faucous noise from the premises, including any outdoor

area. And that is particularly true between the hours of

- 10:00 p.m. and 7:00 a.m. We, of course, will comply with the local ordinance. In addition to that, Staff conditions 5, 8,
- 27 9, 10, 12, 14, and 15 address the noise issue.

23 Finally health and environment, air pollution was 24

25 brought up. And I see in the packet that was handed to me

- 1 this evening that a brief in opposition on our application
- 2 has been submitted to you that contains photostatic copies of
- 3 articles that have been published concerning the vent pipe
- 4 emissions from storage tanks. Let me tell you a little bit
- 5 about some of that research. I thought that might come up.
- 6 But before I do, I would like to just address, if I could, a
- 7 house keeping issue. As I understand your rules.
- 8 cross-examination of witnesses is not permitted. Am I
- 9 correct?

CHAIR MCGEE: That's correct.

10 MR. BOWERS: What is important about that is whether 11 12 a case is considered contested or uncontested, and I believe

13 this is an uncontested case because cross-examination is not

14 permitted. There was a recent Supreme Court case on that

15 issue. I just wanted the record to be clear. So I won't try

16 to cross-examine anyone and I won't make a formal objection

17 which I otherwise would to the admission of those articles.

18 they are hearsay and should not be part of the record. But

19 with that said, the study -- there is only one study that --

that I am aware of that appears in the literature, and that 20

was done last year of two gas stations. One in the Northwest 21

22 and one in the Midwest. And both of them were large gasoline

service stations that operated. Large means a station

24 capable of pumping 3.6 six million gallons per year. And

25 what the study did was analyze the venting of the underground

Page 19

- analysis is based on two gasoline service stations of this
- 2 large size. I would submit to you nothing in that report,
- 3 nothing in that recommendation is applicable to our service

station in this location.

Brian went through the revisions that had been made 5

to our site plan since 2018, and he mentioned that we have significantly enhanced the rear landscape screening between 7

commercial and residences. We've added additional trees.

evergreens, eastern redbud, pear trees, both on the east side

and we've also added trees on the west side. We have added a

six foot fence proposed in the middle of the rear 11

12 landscaping. There is going to be landscaping on both sides

of this fence. And there is already a fence, the fence you 13

saw in the photographs, residents' fences. Ours will be in

addition to that. We discussed whether or not there should

be one fence at our June 24th meeting, and our feedback we got at the time was they wanted both fences, so that is why 17

18 we have two fences.

There was concern last time about the trash 20 enclosures. And so we've relocated the trash enclosures to the northwest to be away from the residences. There was a

concern about light being adjacent to the residences, meaning 22 zero foot candles at the property line, and we've done that.

24 The building height will remain the same. There was comments

before about the rooftop equipment that we had to -- the

19

21

1 storage tanks that have gasoline in them. At the time that

- 2 the tanker trucks are unloading the gas into the underground
- 3 tanks, there is a certain emission that occurs that is vented
- 4 through a pipe. That is how these facilities are
- 5 constructed. There are techniques to capture that air.
- 6 that -- the fumes, the petroleum aerosol, and those
- 7 techniques include what is called a stage one vapor recovery
- 8 system to collect those vapors. We will be employing that
- 9 system. Does that collect all of the vapors? No, the answer
- 10 is, they don't. But it minimizes vapors. And we are doing everything in this operation we can to minimize the vapors.
- 12 What the study of these two stations that was produced last
- 13 year was analyzing was whether or not California's Air 14 Resources Board, their recommendation in the year 2005, that
- 15 a distance of 300 feet should be maintained between schools
- 16 and daycare centers and gasoline service stations that pro --
- 17 that pump 3.6 million gallons of gas a year, should be
- 18 enlarged. And that is just a recommendation. It is not a
- 19 rule. The California AIR Resources Board has a
- 20 recommendation adopted in 2005 that says you shouldn't put a
- 21 day care facility of a school within 300 feet of a large
- 22 Volume gasoline service station. Now, that is not the law
- 23 anywhere. It is just a recommendation. And this article
- 24 that we are talking about was a study as to whether or not
- 25 the 300 foot rule was adequate or not. And it -- all of the

Page 20 1 mechanical equipment on the roof that we were proposing and

2 whether or not it would be an eye sore to the neighborhood to

the east. We've removed it from the rooftop so there will be

4 no equipment on the roof. The equipment will be on the

5 ground and it will be screened from view so that the 6 neighbors to the east won't know it's there. So that's our

presentation. We are here to answer any questions you have

and I'm sure the opposition wants an opportunity to speak.

CHAIR MCGEE: Thank you. Does anyone from 10 the audience want to speak in favor of the project? Does anyone in the audience want to speak in opposition to the

12 project? Please approach the podium and state your name and 13

MR. MLYER: Good evening ladies and gentlemen of [4] 15 the Commission. My name is Jonathan Meyer. T live at 145

Woodlands Drive, Tlive in the Woodlands community. As a community, we've met a number of times and discussed concerns

and whatnot. The memo that we provided kind of summarizes

some of the highlights of those concerns. And I just want to touch briefly on those five areas of concern. Counsel for

Mr. Cuda mentioned the environmental concern, the articles

that were submitted were gathered by some of the members of

23 the community just from independent research that they had done. Consistent throughout those and any just simple Google

25 search shows that primary concerns for the environmental

- impact involving gas stations is benzene gasses, toluene,
- 2 VOC's or volatile organic compounds, earbon monoxide and
- 3 particulate matters. There are a number of ways that those
- 4 concerns are remediated. And I think that was discussed in
- 5 the presentation that some of those methods would be used.
- 6 but there is not any single method or combination of methods
- 7 that completely eliminates those concerns. The nearest
- 8 property owner's property line is 35 feet from the existing
- 9 building. Okay? It's 75 feet to the corner of his house,
- 10 but it's 35 feet to his property line. And of utmost concern
- to members in the neighborhood and as an association is that
- 12 we work together and look out for each other. So the fact
- 13 that this affects two or three of our property owners most
- 14 severely right on the edge, all of the association is
- 15 supporting their objection to the gas station and potential
- 16 soil contamination and dramatic decrease in property value
- for those properties. We have concerns about noise and light
- 18 pollution. And I understand there was a traffic study that
- 19 suggested traffic might not be greater. But common sense is
- 20 just hard for us to get our head around the fact that when
- previous use was a restaurant where average tickets might be 21
- 22 60, 80, \$100 and people came in and sat down for 45 minutes
- 23 to an hour and now we are changing to a convenience store. I
- 24 think you would be hard pressed to assume anybody is going to 24 stay in that store for longer than 10 or 15 minutes and most

Page 23

- Another area of concern for us is the economic
- 2 impact. And when we had the community meeting in June, we
- asked if there had been any economic impact studies done, how 3
- this might affect neighboring businesses, and didn't get real
- direct answers, but came away from the meeting feeling like 5
- the developer felt like the gas station they were
- implementing would be better suited to meet the needs of 7
- folks than some of the other facilities. And we are making
- some assumptions, but couched in those terms is an
- expectation at least one or more of the other businesses that 10
- provide similar services in the neighborhood are going to 11

12

13 The final area that caused us some concern as we sat down and evaluated this as a group was the unintended 14

- consequence of one of the requirements of the City in terms
- of building this second fence. And at the June meeting I
- think one of the neighboring owners in expressing concern 17
- about the noise and light pollution said, hey, as many fences 18
- as are possible, that would be great for him. But by putting 19
- two six-foot privacy fences, at the public meeting in June
- they were going to be 10 feet apart, now they are 15 feet 21
- apart, I think in the proposal, so this is an area where 22
- there is going to be a six-foot privacy fence on two sides 23
  - with trees, in trying to address the concerns of lights
  - coming into the neighborhood, this will be a dark area. We

- 1 likely they are only there two or three minutes, there has
- 2 got to be a dramatic increase in the number of vehicles and
- patrons at this location. And during the neighborhood
- 4 meeting that was mentioned in June we asked how many times
- 5 this 10,000 gallon tanker would be coming and making a
- 6 delivery. And we were told that would happen every three to
- 7 Tive days. And so some of us went and looked online and saw
- 8 that there are a number of different experts in the field and
- 9 one of them is (INAUDIBLE) Hussein that runs
- 10 gasstation business com and his sites talk to potential gas
- station operators and owners about how they should be 1
- profitable and what they should look for, and he sites that 12
- 13 an average fill-up at a convenience store is about 10
- 14 gallons. It ranges in variety. So if a 10,000 gallon tanker
- 15 is coming every three to five days, that tells us that they
- 16 are anticipating somewhere between 60 and 100,000 gallons of 16
- gas being sold on a monthly basis. If there is an average of
- 18 10 gallons per fill-up, they are anticipating traffic of six
- 19 to 10,000 vehicles at that location on a monthly basis just
- 20 for gas sales. And that doesn't take into consideration
- people that would be coming just for convenience store 21
- 22 purchases not necessarily for gas station. So we just are 23 having a hard time getting our head around how there is not
- 24 going to be a dramatic increase in traffic and folks coming
- 25 to and from this particular location.

Page 24 1 are creating an attractive nuisance for vagrants and homeless

- 2 folks to set up and camp and whatnot. We are already
- fighting that. Every time we have a homes association 3
- meeting we have at least one property owner if not two or
- 5 three coming and talking about the fact that on a nearly
- 6 daily basis local law enforcement is having to be called
- 7 because folks will set up tents in those wooded areas on the
- south and east side of the Woodlands neighborhood. And one
- property owner during the last three months has had repeated
- 10 instances where people are jumping her fence and coming
- 11 through her yard. So those are primary concerns.

12 I know some of my other neighborhood, fellow

neighborhood owners, property owners had a few things they 13 wanted to bring up. I appreciate you taking the time to 1.4

15 listen to our concerns.

CHAIR MCGEE: Thank you. Did anyone else

from the audience want to speak in opposition to the project? Please approach the podium, state your name and your 1.8

19 address.

20 MR, CLYMORE: Yeah, my name is Joe Clymore and I

live in the house directly behind the building, so I'm 21

probably a little more concerned than some people. We lived

there about 16 years and we probably wouldn't have bought the 25

24 house if there had been a gas station. There was a

25 restaurant there. It really didn't bother us. But it would

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- I have really bothered us at the time if we were buying a house
- 2 next door to a gas station. We are pretty concerned about
- 3 the health risk for all the kids in the neighborhood. We
- 4 have six grandkids that come over and play at our house, we
- 5 have a couple that moved in, just moved in next door that
- 6 have, I think there are a two- and three-year-old. They are
- 7 next door. They are directly behind the proposed station
- 8 location. So that is a real concern. And I've heard some
- discussion about 300 feet. You know, there is a lot of our
- 10 houses that are well within the 300 feet number. So I don't
- 11 know where that 300 feet number came from. But we are a lot
- closer than that. And then I'm -- I still -- I struggle with 12
- the fact that we just did this. I mean, we just went through 13
- 14 the whole thing. It's basically. It's basically the same
- proposal that we had last fall. So I'm just kind of 15
- 16 discouraged that it looked like the whole thing was down and now it's back up again. So how far do you go? How far can 17
- that go? So, anyway, that's all I have to say. Thank you. 18

19 CHAIR MCGEE: Is there anyone else in the audience that wishes to speak in opposition to the project? 20 21 Please approach the podium and state your name and address.

22 MR. CHAPMAN: My name is John Chapman. I live at

- 23 118 the Woodlands. I was present last year at the Planning
- Commission and City Council and I just want to say that I
- think the City Council decided the decision properly at that 25

- Page 27
- store on the site, but the question I ask is, and Mr. Cuda,
- 2 this Commission is why? Now, his representative attorney
- 3 asked this question at the beginning of this presentation, he
- says we want to answer the question, should this property be
- approved. Well, let's look at that question, should this
- property be approved. One day I drove my vehicle from the
- intersection of the Phillips 66 station at the corner of
- Antioch and I-35. That's Phillips station Number 1. Second 8
- gas station is within three eighths of a mile north at 9
- Antioch and Vivion Road. That is gas station Number 2, which 10
- is the QuikTrip. The third gas station is one mile north,
- which is Conoco at the corner of Antioch and Kendallwood 12
- Parkway. That is Number 3 gas station. And finally, there 13
- was two gas stations one and seven tenths of a mile north on 14
- 15 Highway One and Northeast 72nd Street, which includes the 16 Hy-Vee gas station on the northeast corner and the QuikTrip
- 17 on the northwest corner. That is a total of five gas
- 18 stations all with convenience stores. And the total distance from gas station Number 1 to gas station Number 5 is three 19
- and seven tenths of a mile. Mr. Cuda's position with this
- project is unclear to us as a community because we don't see 21
- a supply and demand for it. We have five gas stations. Why
- put a sixth one in a community that is already mature in
- terms of its businesses and residences? So five gas stations
- is truly enough. I respect and ask the Commission on behalf 25

- 1 time. And I don't want to talk too long, but I do want to
- 2 say that a gas station is not a restaurant. I think all of
- us can understand the differences and what our concerns are. 3
- 4 Pve lived in this neighborhood since 1965. I used to live
- 5 in old Meadowbrook which is right adjacent to ours. This
- 6 building was originally a Red Lobster. It has been some form
- 7 of restaurant for 40 years. Our neighborhood has never been
- 8 opposed to any of the changes from restaurant to restaurant
- 9 to restaurant. But, again, a gas station is not a
- 10 restaurant. And I would like to have you consider voting on this issue as if this were your neighborhood. Thank you 11

12 CHAIR MCGEE: Is there anyone else in the audience that wishes to speak in opposition to the project? 13

MR, McINTOSH: Good evening.

14

15

CHAIR MCGEE: Can you state your name and 16 address?

MR. McINTOSH: John McIntosh el live at 135 the 17 18 Woodlands. Laddressed this Commission a year ago regarding

- 19 this same issue with the same developer but with a slightly
- 20 different site plan, As I did then. I thank the Commission
- 21 for the opportunity to express my concerns for this project
- 22 Our community respects Mr. Cuda and Pauch, LLC's, right to
- 23 build and develop properties. We understand they are in that
- 24 business. However, we strongly disagree with their choice of
- 25 site. They want to develop a gas station and convenience

- of the residents of this community to reject this bid for
- this site. Trespectfully suggest to Mr. Cuda, if he is
- 3 serious about establishing a gas station, and his
- representative said that he is an experienced developer.
- well, I noticed that on the corner of the I -- Highway One
- and 152, they are doing some new construction there. There 6
- is no gas stations there. He can have the pick of the litter 7
- in terms of where he could develop. So my question is, why 8
- would be come and enforce and crowd up and bring in crime --
- and they spoke of crime. We are not talking about the store
- being robbed. We are talking about homeless people. We are 1 I
- talking about people coming in there that are coming in and 12
- breaking into our homes, that are sneaking in and building 13
- camps into those green areas behind of those homes. And this 14
- is just bringing in added vagrancy into our community... So I 1.5
- would ask Mr. Cuda, if he is really a developer and he is really an experienced developer, he will go where he can have
- 17 the pick of the litter and he would have no competition in 18
- terms of his service. So I would respectfully ask you as a
- commission to look at the way we look at it as a community
- and as a family that love our community. And we respect his 21
- right to build and develop. That is not the issue here. But
- he should do it where there is a need for it. Because there 23
- is certainly not a need in our community where we have five 24
- gas stations within three miles. Thank you so very much:

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#### Page 29

CHAIR MCGEE: Does anyone else from the 2 audience wish to speak in opposition to the project?

MR. GEISINGER: 1 do. Thank you, Madam Chairman. 3

4 My name is Steve Geisinger. I'm in 102. I appreciate John,

5 John, and John getting up here because I reiterate all they

6 said. We've got a nice neighborhood and I think we want to

keep it that way. I'm going to -- I would like to read

something to you that was stated at the last meeting on

December 10th. And it was from Carol Suter on the City

10 Council, she says, I think the measure of the success of the

committee or community is often the measure of the trust 11

between citizens and elected officials. When people make 12 investments in their homes where they are going to live and 13

have their families live and be raised, that is based on the

14

trust that the community is going to respect those

investments and how we preserve them. As I listen to them, I

don't want to continue to just reiterate the things that they

said. When we met at the library as counsel, opposing 18

counsel stated, we had asked, have you gone back and visited

the site planning? We thought maybe there would be some 20

changes made. And at that time Mr. Cuda just kind of 21

laughingly said, I don't even think I've gone back and looked 22

at it in the last eight months. We asked if there had been 23

an impact study, because Carol did ask and the rest of the

City Council asked was there something that was done, we do 25

Page 31 In fact, the Conoco station up on the corner at Kendallwood

2 and Antioch, there has been several times where the attendant

3 in there will close the doors, it has got bullet proof glass

4 on it, and he says, you don't want to be here after a certain

time after it's dark. And so we are very concerned from

those standpoints. We think that a restaurant, anything else

would be good. We are just not in favor of this. I also

would ask that you vote no on this particular project. Thank 9

CHAIR MCGEE: Thank you. Does anyone else 10 11

from the audience wish to speak?

MS. GEISINGER: Thank you for letting me be here. 12 I'm Donna Geisinger, I live at 102 Woodlands. Just to 13

reiterate a couple of really important points, John McIntosh 14

talked about how many gas stations there were. All those gas 15

stations are on corners. Corners. So you can come in from 16

one direction and go out the other direction. They never 17

have like a roundabout where this proposed gas station would 19 be. It's sort of like in a small development right next to

the bank. UMB Bank. Also, no one actually talked about how

many liquor stores there are on our street, on Antioch per 21

se. I counted, there is nine. CVS pharmacy, the liquor 22

store behind US Bank, across the street, the bar at Tanner's,

24 Applebee's across the street, the liquor store at Englewood

and Antioch, that is another shopping development, across the

1 not want to lose the CVS and some of the other facilities

that are there, so we have concern there as well. A lot of

elderly people in the area. We would like to have the 3

pharmacy and the CVS stay there. So we are concerned about

the economic impact about being in a convenience store for

those things. The safety issue, I think I want to reiterate

we have homeless that are staying there in the area, in the

8 facility, but also in the wooded areas, as John mentioned.

9 And so we do have to have them out of there. I think this is

10 creating another one of those areas where people could.

vagrants can -- homeless could stay. And the other issue, as

John pointed out, when you start looking at what is the 12

13 viability of a gas station being there, you do have to have

14 traffic. The Conoco station up there, they've had issues

trying to stay open. They've not been able to grow. But if

16 we do have traffic that all the sudden people are going down

the side streets, we are going to have more accidents. And 18 even tonight as we were coming to this meeting there was

19 another accident out in front of the Woodlands area. We have 19

one route in and one route out. People get frustrated coming

21 off Antioch and they go around much faster than 25 miles per

22 hour which is a stated area there. So I appreciate Mr. --

23 counsel opposing counsel talking about some of the studies

24 regarding crime and whatnot, but I would also say some of

25 those things are hearsay, because we can Google those things.

1 street is another liquor store on the either west side or

2 east side, Wal-Mart at the Market has liquor. You can buy

it. You can't buy it by the glass, but they have beer. And

4 Hy-Vee sells liquor at 72nd and Antioch. And also they have

5 the Market Grill where you actually could go in and eat and

6 have a glass of wine or whatever. So there are plenty of

places to buy your favorite beverage. But I don't think we

need to have it right next to our homes. That is all I need

to say. Thank you so much. ()

CHAIR MCGEE: Does anyone else from the

audience wish to speak?

MS. THIESON: Evening. Elisha Thieson from 123 the 12

Woodlands. I would just like to kind of clarify that it was 13

stated earlier when they were talking about the Kaw Valley

engineering site that they had done, they had said the 1.5

run-off would go towards the southwest. I think that is 16

great. Lappreciate that study. I would like it known our 17

houses on the east side are actually downhill, so any run-off 18

that could come from the back side of the property or from

the southern part of the property, it does flow, that water will flow at a southeasterly area and that does flow right

into my back yard because I'm three houses down. So I would

23 like that known, that water is a concern from our area when

you have a lot of pavement and things, the water does come

25 down in there into our yards and causes crosion things like

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Page 35 Page 33 I that. I would like it known as well that when we attended people annually. 80 percent of the people who have needs for 2 food and beverage that can be serviced at a convenience store 2 the meeting with Mr. Chuck Cuda a few months ago. I did ask 3 him if there were any other options for that site that had go to a convenience store rather than a grocery store. So that is background. To your question about what has changed I been explored since he came to that last meeting and he said in the industry since the leaky case -- leaky tank problem 5 that he had tried, he had looked into things, he even talked 5 arose out of tanks that were installed in the '30s, '40s and 6: to the people that were building the Wendy's right next door 6 '50s, which is a significant problem, the State of Missouri If and they were not interested because the site wasn't really has adopted a program to remove those tanks and has done so 8 built for those things. He said that the restaurant is very 8 very efficiently. Modern technology, modern engineering has 9 large, it's hard to get someone who wants to put in a new 10 restaurant because, you know, the changing culture and you've 10 examined this question very carefully. And by the way, I represent QuikTrip in addition to other developers in Kansas got things like Grubhub and all that. And that is fine. But City, so I run into this question frequently. And the answer 12 12 it makes me wonder, is this really a good option, or is this is that almost everything associated with the delivery of 13 13 the only option and that is why they are putting the gas fuel and the dispensing of fuel is double lined. What I mean 14 station in there? We have opposed it numerous times and that 14 by that is, there is a liner inside of the liner on these 15 is what he is saying is maybe the only option, so I question tanks. The tanks are -- the underground tanks are connected as a community should we put something in that is a good 16 16 to monitoring sensors, electronic monitoring sensors that 17 option for everyone or the only option and therefore we are 17 report to a, for lack of a better term, a computer in the 18 just going to deal with what we have to. And we think that 1.8 owner's control facility that tells you if there is any sort 19 is unfair for our neighborhood. Also a concern of mine is 19 of a leak or seepage in an underground tank. The lines that 20 the fact that the store operator is not present at this 20 connect the underground tank to the fueling points that 21 meeting, at least that I'm aware of. He wasn't named. So 21 dispense fuel to the retail customer are double lined. And, 22 that is also a concern of mine, that the person who is 22 again, sensors are installed on those pumps that report to 23 actually going to be operating this store isn't here. It 24 makes me wonder how invested he will be in our community or the central control of the owner, that there is a leak, if a leak occurs. And if a significant leak occurs, the is this a shop that is going to get closed within a couple Page 34 1 electronics are designed to shut off the delivery of fuel so Tyears and he'll just move on to his next place and what are 2 that a spill does not occur. So the technology that you see 2 we going to be left with? Will someone come in? Will we every day in your iPhones and your iPads and your laptops has 3: have an empty gas station? Will we have another situation been adopted and directed towards making these fuel 4. like we have now with an empty property? And then lastly as 4 situations safe. So the modern underground tank, the modern 5 you all noticed today it is very hot outside. They tell you fuel dispensing points and the lines that connect all of that 6 6 on ozone alert days to not fuel your vehicles. I can't give are incredibly safe by modern standards. So I have no 7' you exact reasons why. But it concerns me if they tell you 7 concerns that -- in addition to that. By the way, we've got 8 when it's really hot out not to fuel your vehicles because of 8 significant Federal and State regulations concerning the 9 the vapors and things that go into the air and they installation of these facilities that we have to comply with. 10 contribute to ozone pollution. Do I really want to live 189 There are not only State laws but there is also code of state 1-1 feet from this gas station with those types of issues? And 1.1 regulations has significant regulations on these 12 you have hot days, it makes me very concerned. Thank you installations and how they are operated and maintained. So I 13 CHAIR MCGEE: Does anyone else from the feel very comfortable that the leaky tanks of the past are 14 audience wish to speak in opposition to this project? Seeing not something that we'll see in the future. no one, we will allow Planning Commission members to begin 1.5 15 MR, MARKENSON: Water run-off storm water run-off, 16 16 discussion. Or if you have questions. I can start a it seems to me there is going to be less storm water run-off. speaker's list. Does anyone want to go first? 17 18 because you are taking concrete areas and turning them into MR. MARKENSON: Mr. Bowers, there have been three 18

19 major issues raised. One is kind of a leaky gas tank. We

monitoring systems and so on?

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20 all know that old gas tanks leak and cause problems. What

24 about 130,000 convenience stores operating currently in the 25. United States. And those stores serve about 80 million.

has been done in recent years on the quality of gas tanks and

MR. BOWERS: As additional background, there are

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nun-oil.

19 grassy areas and trees, so there should be less water

22 connection with that I have a letter from Kaw Valley

MR, BOWERS: That's correct. If I could in

23 Engineering dated July 18th of this year addressed to Mr.

Cuda concerning the storm water run-off on Lot 3 of

Kendallwood Center which is what the property owners to the

Page 43 Page 41 1 determine that, I would have to go back and take a look. I I swear. And I know that the reason I quit pumping gas is 2 do believe CVS had gotten out of the tobacco business. It 2 because of all the safety things you had to install on your 3 was CVS and I can't remember -- I eventually think both of 3 tanks. Average guy can't afford it. And they wouldn't sell 4 them did, I would honestly have to go back and take a look. 4 it to you for the right price, anyway. But the evergreen Off the top of my head. 5 trees I like. That's a good buffer. That is a good solid, 5 MR, MARKENSON: And there is no individual business 6 keep the light in. And the piece of property is zoned for 6 that sells tobacco products other than the possibility of CVS 7 7 the use that you are trying to do. It is CP-3. And that is 8 strong, very strong and always has been, I get that. So I there? Or is that a Walgreens there or --MR. GREER: I believe it is a CVS. I'll have to 9 9 was opposed to it the first time because of the hours, but I take a look to be honest with you. I can't determine off the 10 10 don't think the evergreen trees were in there then. That 11 would kill the noise and all of that. So -- and you've tried top of my head off all the stores. 11 MR. NEW: Yeah, a question for the attorney, you 12 to do everything you can to -- we appreciate that. The 12 13 mentioned the volume of the assets disbursed in your study fumes, I'm telling you they won't kill you. Okay? Thank 13 which was, what was that number again, the volume of gas that 14 14 you. was disbursed for a yearly basis in the study? 15 MS. MIDDLETON: I don't have any questions or 15 MR. BOWERS: A large gas station is 3.6 million 16 anything. I guess it does seem like there is an awful lot of 16 competition, so if we are going to allow another one in are 17 gallons. 17 MR. NEW: What is the estimated volume? 18 we causing some place else to close down someplace else that 18 19 we are going to have, you know, to deal with this issue 19 MR, BOWERS: Less than half of that. 20 MR. NEW: Less than half. Okay. That is the only again? I got involved with this group because I wanted to be question I had. Just wanted to know the volume. Okay. able to do something for my community. I can't do anything 21 21 MS, HOMMON: Before I ask my questions, because I 22 about the Amazon rain forest or the icebergs melting or 22 might rule out some of them based on the answer, I have a whatever. When we did the shaping our future a couple years 23 question for City Staff. Can you just clarify for me ago there was, yes, there was commercial, but there was also 25 according to the purview of the Planning Commission what are environment. And from my point of view, yes, it is zoned for Page 44 1 the things that we need to consider? Because I don't want to 1 this use. But when we pave over everything we are kind of 2 shooting ourselves in the foot for surviving on the planet, 2 ask questions that are irrelevant to what we should be shall I say. So I guess I do have a question for City Staff. 3 considering. MR. GREER: Sure. I'm not going to promise I'm 4 Was this zoned -- when it came up last time, was there an 4 going to hit them all, but I'm probably going to get fairly 5 5 issue with the zoning? close. All of the categories that you'll see that the MR, GREER: No ma'am. It has been CP-3 for decades 6 Planning Commission typically considers is within the MS, MIDDLETON: Okay. Thank you. 7 recommended conditions, so the one through 15. Pm just MR. WHITTON: You know, we have a limit on liquor 8 stores. I believe still, don't we? Or liquor establishments? going to give you a couple examples. I probably won't be () able to get them all. But manieured and landscaped areas. 10 MR. GREER: Yes. mechanical equipment, monument signage in general, the MR, WHITTON: But you can't do that for gas station. 11 12 I was here when there was a gas station on every corner in 12 location, and what the trash dumpsters -- are used to enclose it, lighting, the exterior of the project, trash service. 13 the '60s. If you drove down North Oak there was a -- I swear store deliveries, and the hours that those would necessarily 14 to you every corner on North Oak had a gas station. And they 1.1 operate. And then sometimes fencing of course. And then 15 all survived. Edon't think CVS is going to move out because maintaining the growth in between those fencing. Those are 16 they are putting a gas station there. the types of things that planning Commission Typically 17 AIR, MARKENSON: Can Lask a question of Statt? CHAIR MCGLE. Mr. Markenson. considers, especially since it is a site plan and the zoning 18 1.8 is correct for this. Does that answer your question? MR, MARKI NSON: It seems to me we have an ordinance 19 19 MS\_HOMMON; Yes, thank you. So I have a couple of 20 on tobacco sales, on zoning, and you can only have tobacco 20 questions for Mr. Bowers, please. The first question I have 21 sales so many - it has to be at least so many feet from is, just for point of information, Kaw Valley Engineering. 22 other tobacco sales. Does this convenience store fall into they get paid regardless of whether this job goes through or 23 that category? Does the CVS sell tobacco? Does anyone else 24 not, correct? 24 within the range sell tobacco?

MR GREER Off the top of my head Lean't

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MR. BOWERS: That's correct

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Page 45 MS. HOMMON: So they don't have any vested interest 2 in this being a yes? 3 MR. BOWERS: That's correct. MS. HOMMON: Thank you. So safety in the rear of 4 5 the building, how it's presented to us is there will be zero 6 foot candles. I am afraid I don't fully understand what that is. So I may need to ask you to describe that to me. But I 8 have a concern that is typically a darker area, the back side 9 of the buildings, closing late at night. I suspect that you 10 would have employees going to trash receptacles late at 11 night. And we've made it so it's not very bright back there. 12 Is that a safety concern? And what does that look like for 13 you? 14 MR. BOWERS: Well, maybe Brian can answer this 15 better than I, but zero foot candles means fugitive light 16 from the property boundary onto adjacent residential will not occur. Foot candle is a measurement of luminosity. Again, 18 I'm not a lighting engineer. There are other ways of 19 measuring the intensity of light including lumens. Another way of measuring is so many lumens. In this case it would be 20 20 zero lumens. Zero foot -- in other words, there would be no 21 22 light from the property boundary to the residents adjacent. That doesn't mean that you would, with modern lighting you 24 can't light your site so that it's safe and that you can 25 operate. And our lighting, LED lighting will do that. I Page 46 1 don't know if Brian wants to add to that or not. MR. RUOFF: So with the current layout right now we 2 3 have two proposed rear doors. One would be for deliveries. 4 One would be a potential exit only egress door in case there 5 is a fire, there would be no hardware on it. With all the 6 landscaping we are proposing at the back of this building it 7 would be fairly simple to put some wall packs light the

little bit about how they operate and what that means 2 regarding run-off, et cetera? MR. RUOFF: Bio-swales are common in most 3 convenience stores that are being constructed today. It 4 comes from what they call the BMPs, best manageable practice, 6 that is put out by Mark which is an area different cities handle that adopt that, enforce that differently. But 7 Gladstone enforces that to pretty much the full extent. So what that does is rain water that hits in and around the fueling sites would run into a curb inlet and it would be 10 routed into the bio-swale where we have grass, we would have 11 wild grass, some kind of grass system that is out there in the front that would be designed, have special soil, it is 13 completely designed by an engineer. And that it would go through that process, aerate out, and recondition itself 15 before it goes into the storm water. I might add while I'm up here, the storm water on the site currently, we are waived 17 all the way up to the existing fence except for maybe three, 18 four feet which slopes down to our site all the water on this 19 site right now runs to the west, there is two drives there, that water goes out into the street and goes down the street 21 to the storm water culvert. So all the water right now that 22 is on the site is going across the asphalt out into the city 23 24 street and into the existing culvert. We are proposing to take off the back paving area and put in landscaping which 1 reduces the storm water run-off so the City has other

benefits as far as landscaping plants, fresh air from the

plants and that sort of thing, and that water would go into

MS. MIDDLETON: But that is not where the swale is.

MR. RUOFF: The swale is out in front. The swale is

going to be designed around the fueling area of the site. So

the trick is going to be there is five islands and there will

eatch all the water and control it so it is organized and

be a trench drain that runs along the west side and that will

2 3 4 5 6 7 8 perimeter of the building up just at the edge of the building 9 so it would be just isolated to the building. But the trash 9 10 enclosure has been moved to where the new Wendy's is going in 11 and it is out in the parking lot. So there would be no 11 12 reason for anybody to be back there legitimately at night. MS. HOMMON: They will not be going out the back 13

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the ground.

goes to one spot. MS. HOMMON: I have two more questions. The first one is, I understand what you are saying regarding the slope that goes back into -- so are you aware as a developer where the water is coming from that is running down into that property on the south side? MR-BOWERS: The only thing I can think of is it is

17 coming from the bank because we have a curb. So all the 1.8 10 water is controlled on our side and goes in the street and goes to the storm inlet so everything on the side right now is going to that storm inlet. I've actually been out there 21 during a rain storm and watched it physically do that. It is 22 backed up by the engineering 23

AIS. HOMMON: The last question I have is for Austin. 24 25 for City Staff. One of the issues that has been addressed

16 stores work, they -- frequently they don't have restaurant 17 trash. They usually take the trash out during the day. But 18 that one -- the service door is on the north end of that back 19 where it currently is. It is about eight feet I think from 20 the corner, and there is a sidewalk there. I would suggest 21 that stays ht. There would be cameras on that too. At 22 Teast two probably 23 MS\_HOMMON\* The other question I have is I've 24 actually #1 know more about bio-swales than I wish to, but 25 just for the sake of this conversation, can you explain a

MR, RUOFF: No, they would -- the way convenience

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door with trash late at night?

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Page 51 Page 49 individual person will vote on this subject. But the again is the decrease in property value. Do you have any --2 I don't know what the word is, but any anecdotal evidence per 2 Planning Commission does have a certain criteria that they 3 look at, and the recommended conditions are those criteria. 3 se about what improved areas, how that affects property 4 MR, MURCH: Okay. 4 values as opposed to derelict or unoccupied properties? MS. MIDDLETON: I'm finding myself personally 5 5 MR. GREER: I will be the first to admit I am not a opposed to this plan, but as a member of the Planning 6 real estate professional. I wouldn't be able to make that 6 Commission, I'm finding it difficult to find a Planning 7 determination. I wouldn't want to mislead anybody one way or 7 Commission reason to not vote for it. That's all. 8 8 the other. 9 MR. WHITTON: We are talking about a piece of 9 MS. HOMMON: Thank you. commercial property on a four-lane state highway. It may set MR, NEW: This question is for City Council, I do 10 10 11 remember this coming up before, and the question is, doesn't back a little bit, but that is commercial. And in the 11 past -- as a matter of fact, now there is a lot of businesses 12 seem like they have addressed everything from the last -because it was denied, how is it coming to us again basically even in those little houses down there. At one time we had 13 thought about going back 300 feet and running all that land 14 the same approach? 14 and make that all commercial down south of there where all MR. GREER: I'm not sure I understood your question. 15 15 the little houses are businesses to improve that. So I mean, 16 MR. NEW: How are they back here again asking for 17 it is -- it has been zoned for that forever. It is on a the same thing if it was already denied by the City? 17 four-lane state highway. Where else would you put a 18 MR. GREER: Sure. They have the right to reapply. 18 business? You know, we are not really going into the 19 They have the right to reapply and re-adjust their site plan 19 20 residential area. We are just adding more commercial on a 20 and their project and reapply. four-lane highway. And I still like the idea that they put 21 21 MR. NEW: Okay. those great big evergreens, because you won't be able to see MX. HERNANDEZ: How long has that property been 22 22 anything. And they've kept the light on the property. 23 23 vacant? 24 They've taken care of that. And they've tried. They really MR. GREER: Probably closer to two years. And if 24 25 have, I'll be voting for it. 25 I'm mistaken, I'm sure Mr, Cuda could answer that. Page 52 Page 50 CHAIR MCGEE: Are there any other questions MR. CUDA: Over 18 months. 1 2 or comments for the planning commissioners? Mr. Markenson? MR. MURCH: I would like to ask a redundant question 2 MR. MARKENSON: Are we going to have comments after 3 of City Staff, does this site plan meet all the requirements 4 the close of the meeting or is this my time to make a 4 of the current zoning? comment? 5 MR. GREER: Yes, sir. 6 CHAIR MCGEE: This is your time. MR, MURCH: Does it meet all the requirements of the 6 MR. MARKENSON: I'm going to do it then, I think I 7 current plan? 7 8 would rather see a lot of things on this property other than 8 MR. GREER: Yes. a convenience store. It's properly zoned for a convenience 9 MR. MURCH: As a Commission is there anything else 10 store and the site plan resolves any sorts of problems and 10 we are supposed to consider other than master plan or the conflicts. I don't see any way to vote against this measure. fact that you've approved it and it meets the current zoning? 11 That is how I felt really on the first time around. I think MR. GREER: Currently the project addresses all of 12 I made the motion to approve it. I don't -- I wish it were the conditions City Staff has at this time. 13 L3 something else, but it's not, so that is the way it goes. MR. MURCH: So there is no other -- our personal 14 15 Thank you. emotions about bio-swales or vagrancy or --15 MS, MIDDLETON: Does anybody have an issue about the MR. GREER: When coming up with the conditions for 16 16 17 double fence and the safety issue? 17 this project, we did our research and we went through MR, COOKSON: I don't. Currently I'm noting that 18 18 historically what other projects have done and what could the developer has stated they are flexible on where that 19 19 apply to this one. We combined all of those with these 15 fence goes. So I don't have a specific concern at this time. conditions and they were agreeable to all of them. 20 20 21 CHAIR MCGEE: Are there any additional 21 MR. MURCH: So at the end of the day, if it meets 22 comments from Planning Commission members before we close the 22 all of the requirements legally and it meets the requirements public hearing? Do I have a motion to close the public 23 23 mainly of the master plan, how could we do anything other 24 hearing? 24 than vote yes? 25 (Motion made, seconded, and carried.) 25 MR GREER: I don't think we can dictate how each

ł	Page 53 CHAIR MCGEE: I will entertain a motion on	1	Page 5 CERTIFICATE
2 t	his topic.	2	
3	MR. MARKENSON: I move the planning commission	3	1, Nicole M. Calcara, Certified Court Reporter, do
	approve the site plan review of the 6221 North Chestnut	4	hereby certify that on August 19, 2019, I was present and
5 A	Avenue, File No. 2019-008.	5	reported all of the proceedings in the Gladstone City Counc
6	(Motion Seconded.)	6	Hearing; I further certify that the foregoing 54 pages
7	CHAIR MCGEE: Call the roll.	7	contain a complete and accurate transcription of the
8	(Roll called.)	8	proceedings.
9	MR. COOKSON: Yes.	9	
10	MR. EBENRUTH: Yes.	11	
11	MX. HERNANDEZ: Abstained.	12	
12	MS. HOMMON: Yes.	13	
13	MR. MARKENSON: Yes.	14	
14	MS. MIDDLETON: I like the abstain option.	1.78	/s/ Nicole M. Calcara, CCR
15	MR, MURCH: Yes.	15	·
16	MR. NEW: No.	16	Tylodic IVI. Galdara, Gost
17	MR. TURNAGE: Yes.	17	
18	Mr. WHITTON: Yes.	18	
19	CHAIR MCGEE: Yes.	19	
20	CHAIR MCGEE: The motion carries. Are there	20	
21	any communications from City Council? Are there any	21	
22	communications from City Staff?	22	
23	MR. GREER: No, Madam Chairperson. Thank you.	23	
24	CHAIR MCGEE: Any communications from	24	
25	Planning Commission members?	25	
ı	Page 54 MX. HERNANDEZ: Sure. I'm going to recommend that		
	olks show up at the City Council meeting to express concerns		
	I you have any in order to address it whenever it goes		
	pefore the City Council.		
5	MR. MARKENSON: I would like to invite everyone to		
	participate in the Restoration Run Saturday morning at the		
	Atkins-Johnson farm. This is a 5 K walk-run fund raiser that		
	penelits 50 percent for the Atkins-Johnson farm and 50		
	percent for Synergy. Our own Bill Turnage will be		
	participating in that race and is the odds on favorite of		
	coming in first place. I will be parking cars.		
12	MS. HOMMON: I would like to say thank you for		
	coming to everybody for coming and being heard. There was		
	absolutely nothing easy about this. And I'm really glad that		
	the community made it a difficult thing to vote, because you		
	forced us to consider everything that we had to legally		
	consider, and Lappreciate that. That is the way it should		
	be. And it's always hard when it doesn't turn out the way		
	you wish it to be, but thank you so much for coming and being		
	heard.		
21	CHAIR MCGEE: 1'll entertain a motion to		
	adjourn the meeting.		
23	(Motion made, seconded, and carried.)		
24	(Adjournment,)		
	at the second se		

Respectfully submitteg:	<b>\</b>
Cheryl Lando, Recording Secretary	Approved as corrected
A - An -	Approved as submitted
Jennifer McGee, Chair	•

# ORIGINAL

#### GLADSTONE PLANNING COMMISSION HEARING - November 19, 2018

CITY OF GLADSTONE, MISSOURI

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3	GLADSTONE PLANNING COMMISSION HEARING
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5	Monday November 19, 2018
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7	Appearances:
8	Chase Cookson, Commissioner
9	Mike Ebenroth, Commissioner
10	Alicia Hommon, Commissioner
11	Gary Markenson, Commissioner
12	Jennifer McGee, Commissioner
13	Katie Middleton, Commissioner
14	Kim Murch, Commissioner
15	Shari Poindexter, Commissioner
16	Bill Turnage, Commissioner
17	Larry Whitton, Commissioner
18	Don Ward, Chairman
19	
20	NICOLE M. CALCARA, C.C.R.
21	for CROSS REPORTING SERVICE, INC.
22	CRODD HILDRITHO DINTEG, THE
23	
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I'm going to call the Planning MR. CHAIRMAN: 1 Commission for Monday, November 19th, to order. 2 (Roll call.) 3 (Pledge of Allegiance.) 4 MR. CHAIRMAN: Approval of previous minutes from 5 November 5th. Entertain a motion. 6 (Motion made, seconded, and carried.) 7 MR. CHAIRMAN: Okay. Next on the agenda is other 8 business. 9 CITY PLANNER: No other business tonight. 10 MR. CHAIRMAN: Before we go on to the next item on 11 the agenda, I have a little statement here to read real 12 quick. Everyone desiring to speak regarding the application 13 will be given the opportunity to be heard tonight. Your 14 comments should be regarding the application specifically, if 15 you have any questions regarding the application, ask your 16 questions to the commission and I will ask either the 17 applicant or the staff to respond to your question after you 18 have had the opportunity to speak. Order of business will be 19 as follows: There will be a presentation by City staff. 20 After that presentation there will be an opportunity for the 21 Commission to ask questions for clarification, then we'll 22 move forward with public comment. Those wishing to speak in 23 opposition to the application will be heard first. 24 those wishing to speak in favor of the application will be

heard second. We ask that comments be limited to around three minutes. And if you have the same thing as everybody else has said, you can come to the podium here, state your name and address, and say you have the same issues as everybody else. And after we've heard the public comments, we will conduct Commission discussion and potential action. Staff, anything else to add to that?

CITY PLANNER: That's good.

MR. CHAIRMAN: All right. Onto Agenda No. 5, we have a public hearing for a site revision 607 Northeast 69th Street file 2018-015. I will open the public hearing.

Catalano who is requesting a site plan revision for the purpose of an expansion to their Gladstone FOODS operation by adding a new building with one additional loading dock, new paved and parking lot configuration and a side driveway to a new screened trash enclosure. Their plan is to use the existing wall, new concrete block to construct this new addition. There will be additional landscaping such as shrubs and trees added on the north and west side of the property. These proposed improvements do not increase impervious area or run-off, therefore, no storm water improvements are required nor recommended. City staff recommends that the planning commission approve this site plan revision contingent upon compliance with the recommended

1	conditions. Number 1, all exterior existing lighting shall
2	be converted to LED. Dumpster enclosure shall be constructed
3	with materials in colors consistent with primary building,
4	specific colors shall be submitted and approved as part of
5	the building permit. Trash service deliveries and
6	distribution shall be scheduled between the hours of 7:00
7	a.m. and 10:00 p.m. Any and all disturbed areas shall be
8	sodded. All landscaped areas shall be maintained in
9	perpetuity. All mechanical equipment on the roof shall be
10	screened from public view by a parapet similar in design to
11	the rest of the structure. This must be a minimum of 12
12	inches above the tallest piece of mechanical equipment.
13	Thank you and that is all, Mr. Chairman.
14	MR. CHAIRMAN: Is the applicant here?
15	CITY PLANNER: The applicant is here, yes, and the
16	engineers.
17	MS. CATALANO: Kim Catalano, 607 Northeast 69th
18	Street.
19	MR. CHAIRMAN: Are there any questions for the
20	applicant? So you guys are just putting an addition onto the
21	front of the building that is currently there?
22	MS. CATALANO: Correct.
23	MR. CHAIRMAN: Thank you. Is there anybody in the
24	audience that wishes to speak in opposition to this
25	applicant? Is there anybody in the audience that wishes to

speak in favor? Okay. I will close the public hearing is there any comments from commissioners, discussion?

MR. TURNAGE: I worked at this establishment when it first started back in '59, I guess when I was 14, 15 years old. I've been friends with them for a long time, they run a tight ship. I don't know if you've tried their product. But it is terrific products. It is taco shells. It always looks nice, well in appearance, and they are great people. They've employed a ton of people in Gladstone over the last few years.

MR. CHAIRMAN: Entertain a motion?

(Motion made, seconded, and carried.)

MR. CHAIRMAN: Next on the agenda is a public hearing for site revision 6221 North Chestnut Avenue, File 2018-016. I will open the public hearing.

CITY PLANNER: The applicant 3F30 architects is requesting a site plan revision on behalf of Mr. Charles Cuda OPES commercial real estate for the purpose of constructing a convenience store and gas station at 6221 North Chestnut Avenue, formerly known as Tanner's restaurant. Their plan is to significantly remodel the building, bring the structure up to code and retrofit the property using a combination of EIFS, stone, artificial stone and a medal awning for the exterior. The site plan shows additional trees and landscaping being planted on the eastern side of the property

gas station helping create the required 38 feet buffer zone between the subject commercial and residential properties.  There is also proposed landscaping on the western side of the property near the planned monument sign and green space
There is also proposed landscaping on the western side of the
in the second se
property near the planned monument sign and green space
between the two egress and ingress access points off of
Chestnut. City staff recommends that the trees and shrubs
being planted on the property be native to Missouri by nature
in an effort to aid in better street scape and survival.
Regarding the aesthetics of the proposed structure, two
primary guiding principals are described in the City's
Comprehensive Plan. The plan states the City should promote
compatible growth, ensure the design work is the compatible
to the character of the community, promote quality
development and improve area appearance. In the BMP analysis
conducted by Kaw Valley Engineering, run-off drains toward
the southwest corner and a bio-swale will be implemented to
capture and treat run-off from the fueling area prior to
run-off exiting the site. Included in the planning
commission packet is a letter from World Fuel Services
describing the experience of Amir Nadeem Mehndi, who will be
the store operator for the proposed gas and convenience
store. Staff has also included a retail mystery shop score
for the proposed operator for their various other locations.
There are residents in adjacent neighborhoods located to the

east of subject property that are opposed to this particular 1 project. The community development department has received 2 multiple phone calls and a signed letter included in your 3 packet from the Woodlands HOA board in opposition. City 4 staff recommends that the following conditions be considered 5 if the Planning Commission and City Council choose to approve 6 this project request. Number 1, any and all disturbed areas 7 shall be sodded. Number 2, all manicured grass and 8 landscaped areas that'll be irrigated and maintained in 9 perpetuity. Number 3, all mechanical equipment on the roof 10 shall be screened from public view by a parapet or approved 11 screening similar in design to the rest of the structure. 12 This must be a minimum of 12 inches above the tallest piece 13 of mechanical equipment. Number 4, a compliant monument sign 14 shall be used to serve the development. The monument sign 15 will need a minimum of 240 square feet of area landscaping 16 around the sign. Number 5, relocation of the trash dumpster 17 to the northwest corner of the parking lot away from the 18 residential area adjacent to the property. Number 6, all 19 exterior lighting on the site shall be LED and designed to 20 reduce adverse impact on adjoining residential properties. 21 Number 7, outdoor lighting cannot be greater than 0.25 foot 22 candles and 10 feet beyond the property line. Number 8, 23 dumpster shall be enclosed with materials consistent with a 24 primary building. Specific colors shall be submitted and 25

approved as part of the building permit. Number 9, trash service, store deliveries and gasoline refilling (underground commercial gasoline tanks) shall occur between the hours of 7:00 a.m. and 10:00 p.m. Number 10, tractor/trailers, storage containers and other commercial vehicles excluding delivery trucks shall not be parked or stored overnight on the premises. Number 11, no more than 50 percent of the glazed area of the building shall have signage. Number 12, hours of operation are from 5:00 a.m. through 2:00 a.m. The store will be closed from 2:00 a.m through 5:00 a.m., Monday through Sunday. Number 13, signage compliant with the sign code shall be used. Signage shall be approved at the time of permitting. Thank you, and that is all, Mr. Chairman.

MR. CHAIRMAN: Any questions for staff?

COMMISSIONER: To begin with, could you be kind enough to give us a broader picture of those four buildings that are on that block? I just did a drive-by and it looked like three of the four buildings were abandoned.

CITY PLANNER: Sure, one of the old buildings used to be Lawson Bank. Currently that is vacant and we've been hearing rumblings that it might be a doctor's office eventually. And then the old Tanner's property obviously is vacant. And then I'm trying to think of the other two properties. QuikTrip.

COMMISSIONER: It was going to be a laundromat but

1	now it's on hold, I think.
2	CITY PLANNER: Sure. The owner of that development
3	has recently bought another property in Independence and is
4	working on that. His plans are to still develop a laundromat
5	in that location sometime early next year.
6	COMMISSIONER: I have a couple of others. Delivery
7	trucks can park there overnight?
8	CITY PLANNER: Delivery trucks cannot park there
9	overnight.
10	COMMISSIONER: Okay. No. 10
11	CITY PLANNER: Excluding I apologize.
12	COMMISSIONER: Should that be including? You see
13	where I am on 10?
14	CITY PLANNER: Including, yes, sir.
15	COMMISSIONER: Should be including, so any motion we
16	make can I just make a motion to change the word excluding
17	to the word including, number 10 of the recommended
18	conditions, if we could get that out of the way. And if I
19	could if I can move that we, condition No. 10, delete the
20	word excluding and replace it with the word including.
21	I don't see much in here on the screening between the
22	properties to the east and the
23	CITY PLANNER: Between residential and commercial.
24	COMMISSIONER: Yeah. Right now there is a fence and
25	it is deteriorated, it's dilapidated. There is a five foot

agree to that.

MR. CHAIRMAN: Any other questions for staff? Does the applicant wish to come up and speak?

MR. RUOFF: Good evening. My name is Brian Ruoff. I'm with 3F30 Architects. I'm representing the developer, Chuck Cuda, who is behind me. I'm going to make this very brief, because I think everybody understands the project in its entirety, we are agreeable to the entire list with the one exception is we are not -- we have not confirmed the structural capability of the tall parapets on this building So we are agreeable to screen. We just don't know exactly how that is going to occur. We have the option of parapet walls, but then we get snow drifting issues and without having a full structural analysis of the roof structure at this point in time I don't know what I can do. We are trying to get the front up as far as we can because it is a new wall. The whole front wall is going to be new because I don't know if everybody understands, we are taking 20 some feet off the existing building and rebuilding that entire front face for store front. So with that said, the other options would be hats on the rooftop units, other options that may or may not be the best option we have available. So I would promote a little more landscaping or strategic placement of trees for that one line item. Going backwards slightly we have tried our best to get the 35 feet of landscaping between the residential and the commercial

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And all that has to come out. There is a huge walk-in, there

greatly simplified from what is there now, if anybody has

been in this the original Tanner's. The kitchen is huge.

is a huge hood. All of that has to be removed.

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COMMISSIONER: Hours are going to be from 5 to 2?

MR. RUOFF: It is. We are agreeable to what staff put in the report.

CITY PLANNER: We were suggesting between 2:00 a.m and 5:00 a.m. that they would close down.

MR. RUOFF: And the owner, developer and operator are agreeable to those hours. I've done many, many convenience stores in the past over the years. I used to work, do stores for Phillips and Conoco and that sort of thing. The petroleum part of this is going to be I think very well laid out. It is going to be smooth and it is going to operate as it should. From a convenience store standpoint, that is an operational question. But it is a 4,000, 5,000 square foot building. So it should be comfortable and have quite a bit of amenities on the inside. No drive-through. I think drive-through was a concern with the neighborhood. Because of the landscaping we are completely landscaping the east side of this property so there will be no drive-through. We are amiable to moving the trash enclosures to the McDonald's side of the lot. I think McDonald's is 24 hours, you know, in operation but they have an easement that runs through that property so it is trash enclosure will be between their easement and where the bank property is. We are amiable. We are going to completely

So we are basically agreeable relocate the trash enclosure. to the entire list of conditions.

COMMISSIONER: I'm sorry I have so many questions. Can you tell me a little bit more about the screening, the trees you are going to plant on the east side of the building? I'm still a little hazy on what you are doing there. Wrong person again? I'll get the right person if I keep asking the question.

MR. RUOFF: Well, right now it is a very preliminary landscape plan. But we are proposing a lot more trees than shrubs, because the trees are going to be beneficial. this is the property as it is now. And the building extends out to here. We are taking off this part of the building. We are going to rebuild the front. This is all going to be the existing building, structurally, you know, everything inside here has to be dealt with, panels, panel room, all that has to stay because that is the only way to meet the budget on the project. We are proposing anything back here that is not part of the building or the sidewalk system would be removed and landscaped. So we can plant plants here, but the neighborhood won't benefit from the plants we are willing to do that. But the trees are going to be the biggest benefits for the houses for the neighborhood. So this is our -- this is our solution to the screening on the back side of the building, is to get these trees in here. Now what

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I've got is, I've got some medium size and some -- basically 1 I'll tell you exactly what they are right now, it is a Norway 2 maple and Patmore ash. So it is a combination -- we are open 3 to anything in here, but we want to make sure they are 4 selected and placed so we can get the most benefit and that can be done by sightlines and those sort of things. front end we have to get traffic through here, so we've done 7 this triangular shape around the monument sign that will be 8 landscaped with flowering plants, this is the green space 9 here I have to work with the civil engineer on, because this 10 is going to be held down so water will run through that 11 filter. And there is the trash enclosure location now -- I'm sorry future. And now it's right here. So that is what -we are proposing to move it away. 14

COMMISSIONER: Where is the gas tanks going to go? MR. RUOFF: Gas tank right now, I've done a bunch of these -- gas tank right here. Okay. From a tanker standpoint, I used to bring actual drivers to these meetings which was always interesting, because they would say, well, I gotta back the truck -- they do the whole scenario of how they get the truck on and off-site. I don't want them to back up if I don't have to. My goal is to get a tanker on and off-site without backing up this site. They are going to probably come in this way and swing around. They've got to come all the way around here. And most tankers drop on the

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COMMISSIONER: Just so that I'm clear, you are going to tear out the concrete that is behind the building that is all crater, and looks like there has been bombs dropped on it and stuff, you are going to take that out and put in dirt and sod and put the trees on that?

MR. RUOFF: It is going to be fully landscaped. It is going to be sod and trees. My preference is sod and trees. What you've seen in your packet is the -- a little short of 35 feet because I was given the 35 foot condition later. This is the 35 foot line right here. This line right here. So we are going to take out to the sidewalk, I have a transformer here there is that shed back here. We are taking everything out that we can and landscaping.

MR. CHAIRMAN: Any other questions from the commissioners?

COMMISSIONER: There is a Conoco station a couple blocks across the street to the west. Will that continue to operate, or are they separate entities unrelated, unrelated? Okay.

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COMMISSIONER: So you are going to need a variance 1 as far as the set-back on part of that, you don't have 35 2 3 feet? MR. RUOFF: Well, that is up to staff. 4 5 CITY PLANNER: No. Since it is CP zoning, the planned portion of that gives a little bit of flexibility, so 6 a variance wouldn't be needed. 7 COMMISSIONER: I just wondered if you needed to go 8 to BZA and get a variance. 9 CITY PLANNER: We didn't think that was necessary. 10 MR. RUOFF: We are caught between existing building, 11 we'll do what is required. 12 MR. CHAIRMAN: Any other questions? 13 COMMISSIONER: Yeah. I think I know, but can you 14 clarify what kind of access there would be for traffic from 15 that building to the neighborhood, behind there, what roads 16 are back there they would use to get -- I mean, part of the 17 thing is to increase traffic to the neighborhood. How will 18 that increase traffic to the neighborhood? 19 MR. RUOFF: The entrance of the neighborhood is 20 21 several blocks, I don't know what is the street that goes, 22 Shady Lane. This is bank property right here on this edge. And so we have no real landscape on that edge on that side 23 available because the parking property line is right on 24

our -- existing property line.

I just wanted clarification on that. COMMISSIONER: 1 MR. CHAIRMAN: Any other questions? 2 COMMISSIONER: I'm not sure you are the person for 3 this either, but I was -- the hours of operation, the 4 restriction on them is very unusual. I can't think of 5 anything that we restrict except liquor sales. Several 6 months ago when we had the laundromat issue we put in 7 restrictions on hours, but the City Council felt that was 8 unwarranted and took them out. So the laundromat can operate 9 24 hours a day. But a convenience store that generally 10 operates 24 hours a day would be restricted. Is that a 11 problem for you, putting you at a competitive disadvantage 12 with Hy-Vee and QuikTrip and others? 13 MR. RUOFF: Well, because I've done 100 of these 14 over 25 years the ownership, that opinion does vary. 15 convenience store owners would like to stay open for 24 hours 16 for two reasons. One is it does bring a little more revenue, 17 but also it is a security issue, that they want -- they like 18 to have somebody on their site 24 hours a day so they don't 19 have other issues. They like a 24-hour operation so that 20 they are watching their stores. 21 COMMISSIONER: It is not a big time for business, 22 though, is it? 23 MR. RUOFF: They usually lose money on the sales 24 It depends on your relocation and what you are doing.

But, yes. 1 COMMISSIONER: It is not a problem for the owners, 2 is that what you are saying? 3 MR. RUOFF: Well, Chuck, do you want to talk about 4 that? 5 MR. CUDA: It is not an issue in this particular 6 7 case. MR. CHAIRMAN: Step up to the mic. State who you 9 are and your address. MR. CUDA: Chuck Cuda, 6051 North Chestnut, 10 Gladstone, Missouri. For this particular instance we felt 11 that we would be amenable to the neighborhood and it would be 12 beneficial to everybody if we operated within these hours, so 13 the owner feels that with this particular demographic he is 14 . comfortable with these hours. And to the point about the 15 screening, with the topography differential with the houses 16 sitting lower we could put bushes over there but, we feel the 17 trees provide the better screening. And regarding the fence 18 with the differential of wood that is being used on those, we 19 feel it is each homeowner's fence, it's their particular 20 fence, but we would be amicable to looking at possibly 21 re-screening that back side once we are done with 22 construction. 23 MR. CHAIRMAN: So the fence isn't part of your guys' 24

development?

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MR. CHAIRMAN: Any other questions for the applicant? Okay. All right, next on is anybody in the audience wishing to speak in opposition, please step to the mic and state your name and address, please.

MS. BAKER: Good evening, Michelle Baker, 108 the Thank you for affording me the opportunity to come and speak before you in lieu of being with my family watching the Chiefs play, which I'm sure right about now you would rather be watching as well. My attendance dance here is twofold. One, for my own personal voice and the second to be the voice for at least 44 residents of the Woodlands neighborhood who have responded that they did not want this site re-planned. We are a small close-knit single access neighborhood of 95 residents. I've already shared with you the residents' comments in writing in the packet. I printed out additional ones that we've received since then if you would like to see those as well. Some of the main issues and concerns that we have are the disruptions due to the proximity to the residents' property in the form but not limited to the hours of operation. I know that you've already touched on it our problem is that 5:00 a.m. to 2:00 a.m is really late for our neighborhood. And the noise that will be generated with traffic flow and lighting would be

detrimental, especially to the six houses that butt right up 1 close to that. The potential of water leakage from underground tanks is a worry and a concern for the neighbors, 3 the large tanker and delivery trucks, the -- if you are 4 familiar with Chestnut, the street of Chestnut itself, it's a 5 small little access. It is right there in front of -- it's 6 only access for UMB Bank, the property at 6221 Chestnut. 7 That's it. Because then it curves around and then you 8 actually have to go back around to get into where Lawson Bank 9 used to be. So for a tanker hauling gasoline to be able to 10 manage that, there is going to be, I would think and the 11 neighbors think, substantial destruction of that street right 12 there. It is not an easy turn. You've got the little 13 boulevard that is the beginning of Antioch right there where 14 it splits across the street from CVS. So you have that 15 entrance. And then another entrance coming in from where 16 Lawson Bank used to be off Antioch. The lighting, once 17 again, is so close to the neighborhood that the lighting 18 would be a distraction to those homes. As well as the noise 19 level. Not to mention the increased air pollution from 20 pumping gas, which the US Energy Information Agency says that 21 it's detrimental as far as green house gasses, carbon dioxide 2.2 that is emitted. And that's why during high ozone times they 23 say please don't fill up your cars with gas right now. Well, 24 that is right there behind our neighborhood. Sewage and 25

water run-off issues and the potential for devaluation of the property due to the proximity. I would encourage the planning committee to not only consider what the closest neighborhood, the Woodlands, wishes with regards to this plan revision but to also think about what is best for the City of Gladstone. Does the City of Gladstone truly need another gas station, slash, convenience store when we have 20 right now as far as Google Maps goes and 14 convenience stores, all within the area. Or would it be better for Gladstone to have a restaurant Gladstone residents as well as neighboring cities can come and enjoy and frequent? Thank you very much.

Thank you. Anybody else in the MR. CHAIRMAN: audience that wishes to speak in opposition?

MR. McINTOSH: John McIntosh, 135 the Woodlands, Gladstone. Chairman Moore, commissioners, I moved here from Los Angeles two years ago and my wife and I, we chose the Woodlands because we enjoyed the wonderful ambience of the trees and everything we live in that was there. And the only thing I just want to add to my fellow neighbor Michelle is that in Los Angeles we had a problem and we brought it up before the City Council, I lived in Whittier, which is a suburb with liquor stores, they had liquor stores on every corner. And so I equate this particular project, a gas station, to the liquor store problem that we had. Why have another gas station when I know we have four in the proximity

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of between a mile and a mile and a half between each of them. 1 We have one on Antioch and Vivion. You have one -- a Conoco on Antioch and Kendallwood. Then you have the gas station at 3 Hy-Vee there. And then across the street there is a Quick 4 Pick there. So my question is, why another gas station? So 5 I equate it to like the liquor stores and what it would do, 6 it would bring unnecessary traffic and later possibly crime 7 into the community we don't need. And so I would just ask 8 you to consider our needs, because there is other things we 9 can probably put there that will be more convenient for the 10 community rather than a gas station. Thank you for your 11 time. 12 MR. CHAIRMAN: Is there anybody else in the audience 13 that wishes to speak in opposition? 14 Ι 15

MR. CHAPMAN: John Chapman, 118 the Woodlands. don't have no problem against commercial development. I've lived in this area since about 1965 from Old Meadowbrook to Brooketree, now the Woodlands. That building has been Red Lobster, Old Chicago pizza, Tanner's, Tommmy's and I think a barbecue place. If these developers want to put in another restaurant, I would be frequenting it. But I'm concerned with pollution issues. I'm concerned with light pollution, air pollution, water pollution and pollution pollution. And so I'm against the development.

MR. CHAIRMAN: Thank you. Anybody else in the

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audience?

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MR. SKINNER: Zachary Skinner, 105 the Woodlands. Nothing really to add but to support my neighbors.

MR. CHAIRMAN: Thank you.

MS. THIESSON: Alicia Thiesson, 123 Woodlands. live in one of the area that is fairly close to that. We have four kids. We moved into this neighborhood a year and a half ago. We knew that there was restaurants back there, there is a bank back there. We were aware of all that. But a gas station we feel like is a completely different topic. Our two-year-old -- sorry. She has health issues. them being in her lungs. So it's a concern of ours that we made this investment into a property and into a neighborhood, we felt like our family would be safe and then the issues that you can have from the pollution and things could further cause her additional health issues. We also have a pool in our backyard, which when you add in all of those factors we spend a lot of time outside, and that would be an issue for us along as resale value. We feel like if we were to need to move, it would be very difficult knowing that there is a gas station right there to sell our home, we feel like we would have trouble. Nobody is going to want to buy a house with a pool in the back yard and a gas station within -- from our house it's probably 200 yards or so, but it is still close enough we feel like it would cause issues.

MR. CHAIRMAN: Anybody else?

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MS. NARCUS: Michelle Narcus, 82 the Woodlands. ourselves just moved to a town home that is in the Woodlands development a year and a half ago. Ditto for all the same issues that have been expressed. Including the property I myself don't happen to have a property that is adjacent to that, but I feel that it will definitely not help the value of the homes that do back up to that. The Woodlands is a very nice, well kept community and even though it was developed in the early '80s and the traffic there is congested enough at, I guess Shady Lane, whatever turns into there at Antioch, a lot of congestion, it is really hard, difficult to get out. That is just going to make it worse. I would say for some reason if the committee would make the decision that the development is going to go through that I definitely think that the developers and the owners should be responsible for paying for a very large private fence amongst all those properties that are adjacent to that property.

> MR. CHAIRMAN: Thank you.

MS. GUYSINGER: Hi there, I'm Donna Guysinger. live at 102 the Woodlands. I don't back up there, but I'm down the street. And I -- we have been in the neighborhood for 25 years. And when we first moved in here, it was kind of nice to have the little restaurant back there. And it wasn't an issue with noise. And you can hear the noise

currently on Antioch. All the police that go by and the fire 1 trucks, it just seems to like it has increased. However, to 2 have a convenience store and a gas station backed -- I'm 3 going to say 300 feet or 400 feet from your driveway, I can 4 only imagine all the noise that is going to create, not just 5 with big trucks, but with the garbage, you know, the garbage 6 guys coming and people putting in all the glass. There used 7 to be a Ripple glass area over there, that was so hard to 8 This is the Woodlands, the homes, 300, 350,000 and up 9 okay? So it's not just a small property. And everyone keeps 10 their property up very, very well. We have lots of trees. 11 But even still, with all that, you still hear a lot of noise. 12 And that is a concern. Especially for the people that 13 surround the property, if you are sitting in your back yard 14 on a Saturday afternoon with your friends and you hear all 15 the noise going on, I would be totally disturbed about that. 16 It would really ruin the ambience of that -- of the 17 Woodlands. It is a very nice neighborhood. It's quaint and 18 it's small and we like it like that. And I have like really 19 loved it since there haven't been hardly any -- Tanner's is 20 gone and the other building is gone, so it's really nice. It 21 is nice and quiet. And that is the way we like it. And the 22 other neighborhood that is by the Woodlands is much smaller 23 but still they are very quiet, lots of trees, they want it 24 that way. And I've talked to several of the homeowners and 25

they are very concerned also. They are just right down there. Thank you very much.

MR. CHAIRMAN: Anybody else?

MR. CLIMOORE: My name is Joe Climoore and we live in the closest house to the building. We live at 127 the Woodlands. And we are really concerned about the light and the noise. Of course everything that everyone else said about the situation there. But I hadn't really thought until she said about the trucks turning in, it is not a very good place for trucks in and out. So really that is our greatest concern is the noise and the lights. Tanner's was a good neighbor. We -- Tanner's was probably the best. We hardly -- maybe they didn't do any business. I don't know. They were very quiet back there. When the other place was there, they made a lot of noise and bottles over the fence. But Tanner's did very well. Like I say, maybe they didn't do a lot. So thanks.

MR. CHAIRMAN: Thank you.

MS. THIESSON: Berna Thiesson, 123 the Woodlands.

My main concern by the health of my child who I already have to take to regular doctor's visits is everyone's health actually within our community. We have a slightly older population within our community. I'm worried about the air quality. I know that although it didn't pass, several BP organizations tried to push through not allowing a gas

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station 500 feet on the back line property from residential properties. We are looking at 35 feet. And that is 35 feet of like a quarter of that. So how much is like 25 feet? It just keeps getting closer and closer to the properties. every single time someone is re-fueling, every single time the tankers come in, we are going to smell it in our back yards and smell it in our front yards. And it is not what we signed up for when we moved to this community. It is outrageous. Unfortunately when the gas station is already there, you know what you are getting into. And I think no one signed up for this within this community. So, I mean, in a year or two when my daughter has health issues, who do I submit petitions to that it has been a detriment to her health? That I can't take my daughter in my back yard because I'm worried about water pollution coming in the run-offs and there is not even going to be a fence. all about cost. They are trying to put whatever works in there for the lowest amount of cost without really caring what is good for our community. It is just outrageous. Not even affording a fence. We already talked about the fence at the last meeting with him. It is not even in the plan, so obviously he doesn't care what the community wants and he doesn't care about the safety and the health of our community. So just it's kind of crazy, but just the fact that I bought this home to raise my four children in and now

we are considering moving out of the community. The second it gets approves we are out. It is just insane. Thank you.

MR. CHAIRMAN: Anybody else in the audience?

MS. VANDERBERG: Winnie Vanderberg, 45 the Woodlands, also a broker person for Re/Max and I have been for almost 40 years and I have had experience with these sort of projects. And I spoke out at the last meeting. adamantly opposed to this. I think there are far more negatives than positives. I've not seen any site studies that give us anything that is going to tell us that it is going to help our property values. I feel our property values are going to be dramatically diminished. Already there are three properties up for sale in the neighborhood. And I feel according to what I'm hearing here there are probably going to be more. So what are we looking at, 10,000 20,000, \$30,000 in losses? I moved to the Woodlands as a I work still at Re/Max. I'm on Kendallwood Parkway. I moved there to be safe, to have a quiet place to live and a place to enjoy my seven grandsons. This does not make me happy, nor does it make anyone in our neighborhood, the 95 homes, happy. I feel that if Mr. Cuda had presented this as a restaurant or some other use that we would be much happier. I don't feel that this is the highest and best use of that space for us as residents there. And I feel if Gladstone causes this entire community to gradually dissolve and lose

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value, then what does that say about us as a city? would ask for you to consider that. Thank you.

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MR. CHAIRMAN: Anybody else in the audience wish to speak in opposition? Is there anybody in the audience -- oh sorry.

My name is Merill Watt. MR. WATT: registered professional engineer. 34 the Woodlands. addition to the comments you've heard from other members of the Woodlands Homeowners Association, I would like to just point out something that concerns me greatly; however, it is not the most important subject that has come up. Health, safety, and welfare happens to be the Number 1 issue in my mind. However, what I would like to learn is if an economic assessment impact study has been made that projects the decreased value, cumulatively, for all properties within the Woodlands Homeowners Association. We've heard from a realtor that has more than 30 years experience who is gravely concerned about a market depreciation of those individual and thus cumulative property values. If, in fact, the assessment bears out that is so, what remediation financial pool is the developer or owner going to offer to offset over a long period of time, a very long period of time, the depreciation in the asset value? Keep in mind that I believe you heard this evening from at least one to possibly two owners that have stated they moved in approximately two years ago. And

1	with a simple market depreciation of 10 to 12 percent you
2	could be talking well over two million dollars if properly
3	assessed. I'm not a certified financial planner. I just
4	want to point this out. There seems to be no thought for
5	those people who have lived there before this idea came to
6	fruition. And so I would like to see, is there a sinking
7	fund who manages it? How much is it? Because once the
8	decent curb flattens out on the property valuations, it's
9	very difficult to get them back up. Many of you have bought
10	and sold homes and you realize that the appraised value seems
11	to work when you are buying or selling off of what previous
12	sales have been for like and similar properties in the
13	immediate area. So once oppressed, it is very difficult to
14	get them to rise again. This concludes my remarks. Again,
15	health, safety and welfare of people in my perspective is
16	Number 1, and this onerous potential economic depreciation
17	concerns me greatly. Thank you very much for your time and
18	consideration. I hope that you oppose this project.
19	MR. CHAIRMAN: Anybody else in the audience wish to
20	speak in opposition? Seeing no more, is there anybody in the
21	audience that wishes to speak in favor of the idea? No
22	response.

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MR. CHAIRMAN: All right. Is there any discussion by the planning commission?

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COMMISSIONER: Can I offer another amendment?

1 MR. CHAIRMAN: Yes. COMMISSIONER: Condition No. 14, the applicant shall 2 replace the fence on east side of property with a six foot 3 privacy fence. We've been talking about it and we've not 4 5 done anything with that. COMMISSIONER: I'll second that motion. 6 applicant shall replace the fence on the east side of 7 property with a six-foot privacy fence. And I use the word 8 replace because I think the fence that is there needs to come 9 down before it falls down. 10 COMMISSIONER: If the fence is on a property that is 11 owned by someone else, is that legal for us to require it? 12 CITY PLANNER: The fence, if it is on private 13 property, not on this property, then they cannot take it 14 They would be damaging private property. They can put 15 down. a secondary fence up on their property. Though, you do have 16 the problem of two fences being next to each other and issues 17 that happen between two fences, that type of thing. But they 18 could not take the other fence down unless the homeowner 19 allowed them to do it. 20 COMMISSIONER: I'll withdraw my motion. 21 MR. CHAIRMAN: Thank you. 22 COMMISSIONER: So I would like to say that I 23 personally don't have a problem with this but I think that we 24 need to consider all these people who came out to speak 25

CITY PLANNER: It is a different neighborhood. 1 COMMISSIONER: Isn't it real close in proximity to 2 the Woodlands. 3 CITY PLANNER: Not as close. I don't actually 4 physically have the map, I could not tell you exactly, but it 5 does not appear to be as close. 6 COMMISSIONER: So McDonald's, the bank, not the 7 Lawson, but the other bank and then --8 CITY PLANNER: Then the old QuikTrip and yeah --9 10 Yep. COMMISSIONER: I've heard Tanner's referred to as a 11 restaurant a lot. My personal opinion is that was more of a 12 bar than a restaurant. 13 CITY PLANNER: It was a restaurant/grill. 14 this -- all the years it has been there from Red Lobster to 15 Tanner's, it has been some form of restaurant/grill bar-type 16 17 thing. COMMISSIONER: They had outdoor seating and that 18 wasn't a problem is what I heard? 19 CITY PLANNER: Outdoor seating was actually on the 20 west side of the building. 21 COMMISSIONER: But from a noise perspective, that 22 wasn't a problem? I mean, all -- any noise or whatever 23 should be on the west side of the building in the C store as 2.4 25 well.

1	change since this development.
2	COMMISSIONER: How long has that property been CP3?
3	CITY PLANNER: Somewhere back in the '80s, late
4	'70s. I'm not 100 percent sure when Red Lobster, whenever
5	Red Lobster was the original.
6	COMMISSIONER: What are the types of businesses in
7	general that can go into CP3?
8	CITY PLANNER: There is a lot. Anywhere from the
9	convenience store, restaurants basically anything C 1, C 2.
10	COMMISSIONER: How long have those been vacant, do
11	you know just about?
12	CITY PLANNER: The Lawson BANK recently were bought
13	out by Bank Liberty sometime this year. They moved out of
14	there. The QuikTrip was last year when it closed up. And
15	those are the ones that are empty besides Tanner's moved out
16	maybe two years ago pushing that at the most.
17	COMMISSIONER: Thank you.
18	COMMISSIONER: I haven't given up on the privacy
19	fence.
20	CITY PLANNER: Mr. Chairman, you do need to close
21	the public hearing?
22	MR. CHAIRMAN: We'll close the public hearing.
23	COMMISSIONER: I wonder if we could consider
24	wording I'm not making a motion yet that says the
25	applicant shall build a six-foot privacy fence on the east

side of the property in addition to the plantings. 1 COMMISSIONER: Contingent upon homeowners. 2 COMMISSIONER: No, on the applicant's property, so 3 you are going to have fence on fence, but still going to have 4 a decent screen. And then the property owners can tear down 5 their fence, which I would recommend before it falls. Could 6 that be done? 7 CITY PLANNER: I think as long as the developer would agree to that, I believe he stated he would do 9 something along those lines. We could add that as a 10 condition, yes. 11 COMMISSIONER: What would we do about growth in 12 between the two fences? Weed and vegetation? 13 CITY PLANNER: That becomes an issue. You could put 14 the fences -- I don't know how far their fence is off the 15 property line, that becomes an issue. Ideally you don't want 16 to have two fences because it does cause issues between the 17 two fences for maintenance and whose responsibility it is to 18 maintain those fences. So --19 MR. CHAIRMAN: If something like that was done there 20 needs to be a separation of fences so that there is 21 maintenance that could be done between the two. 22 CITY PLANNER: That would be correct. And depending 23 where the current fence is, how much property and who is 24 going to maintain it, that type of thing. 25

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understand the procedures, so the people out there understand

1	the procedure, if we support this, it is a recommendation
2	that goes to the Council. If we do not recommend it, it goes
3	to the Council with no recommendation? How does that work
4	exactly?
5	CITY PLANNER: Well, if the Planning Commission does
6	not recommend this project, we will probably work with the
7	developer and the neighborhood to try to come to some type of
8	agreement before it gets brought to City Council.
9	COMMISSIONER: But it will go to the City Council no
10	matter what we do?
11	COMMISSIONER: Yes.
12	CITY PLANNER: Yes.
13	COMMISSIONER: On the east side I notice there is a
14	eight-inch tall curb that is, is it my correct understanding
15	that that is all going to be taken out? That curb? Because
16	that kind of keeps any water for getting into the back yards
17	of about three or four home homes there.
18	CITY PLANNER: I am going to ask for the architect
19	to go ahead and answer that question.
20	MR. RUOFF: Actually that is a good question,
21	because when we take all that paving out, storm water and
22	rain will soak into that ground. Which is a benefit and it
23	is a catch 22 in some ways. So I would send it to a civil
24	engineer to make sure we have to berm it or control it, we

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don't want any water going to the residential, but right now

that water that is landing on that pavement is going to all 1 the -- it is going away from the residential properties completely all the way to the street. So when we put the 3 plantings and such in there, it is going -- the ground water 4 could saturate. But we don't want any storm water running to 5 the east. It is going to be a civil engineering question 6 when it's all over. 7 COMMISSIONER: But that curb you think is going to 8 9 come out? MR. RUOFF: Yeah, we'll have a new curb in front of 10 the landscaping that will be another curb, but that entire 11 site flows to the west. The north side goes up north and the 12 south side goes up south. That is -- we are not changing the 13 way water flows. 14 COMMISSIONER: Your pond that is the fancy word, the 15 bayou, whatever, that is kind of in the center of the 16 property there, that is not in the southwest corner and that 17 is where in here someplace I saw was going to be in the 18 southwest corner. 19 MR. RUOFF: The petroleum island area is actually in 20 the middle -- is kind of flat so we are going to catch most 21 of it into that island. 22 23 COMMISSIONER: If you built 25 of these, do you see

in this pond?

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a lot of, call it spilled gasoline or whatever, that ends up

MR. RUFF: We are under BMP's, Gladstone is. Kansas 1 City Missouri doesn't enforce but Kansas City Kansas does, it 2 is a metro plan, it is a strategy put together by MARC, 3 Mid-America Regional Council, it is a guideline. The problem 4 with that is it just depends on how you handle certain sites 5 and what the situation is. In my experience is the BMP's are 6 relatively new to most municipalities. They've been working 7 with them for about six, seven, eight years. Some cities 8 don't even use them. But in this situation you are going to 9 have a brand new fuel system. You are going to have all the 10 pressure gauging, all the warning -- you are going to have 11 all the safety situations. All the lines are pressurized all 12 the time. If there is a pressure failure the, alarm goes 13 off, the system shuts down, somebody comes out and looks. 14 The new technology is the highest technology available for 15 that. Now, what the pond is for is when people are putting 16 their gas in and out and they drip. You get a real heavy 17 rain storm that comes through and water will wash through 18 That will accumulate that first rain amount, the 19 there. initial rain fall that catches in that pond and filters it 20 and it keeps the site cleaner. That is what it is really 21 intended for. So but from a spill and leaks and that sort of 22 thing, it is not the same as it was with the steel tanks 30 23 years ago. With that said, it is not fool proof. I'm 24 describing this the way it is. But any time you get a new 25

tanks are never going to leak or not contaminate the ground?

MR. RUOFF: I don't think I'm insured to say that, but I've worked with -- I did all the corporate stores with

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the previous employer for Phillips, Texaco, Conoco and none 1 of those stores, to my knowledge, have ever had an issue. 2 But I've done several private stores and I do all the Express 3 Marts, which are not really up north of the river. I've done 4 Express Marts. We've done 12 sites with them over the years, 5 6 never had any problems. But they will have warnings go off every once in a while where they have an issue with the 7 dispenser and it is not a leak, there is a containment box 8 there, but the alarm goes off and they'll come out and check 9 it. From A tank standpoint, this is something that is new, 10 about two years ago Missouri set a deadline for all tanks 11 going in the ground have to be double wall. What that means 12 is, used to be able to put in a single wall steel tank. 13 is the ones we had problems with 30 years ago. If they had a 14 leak, you had no way of controlling it. Now everything is 15 going to be double walls. Most of them are going to be 16 fiberglass. You have the big fiberglass tank with the two 17 walls and it is interstitial. There is a space in between. 18 If the inner wall leaks, it sets off the alarm. And if that 19 occurs, then they shut the site down. They come out and 20 remove the tank before it goes to the second tank. There is 21 a lot more going on now than there was in the '80s. 22 23 COMMISSIONER: I direct probably to the staff, if

COMMISSIONER: I direct probably to the staff, if this gas station C Star doesn't make it or whatever, is there any ordinances or anything that these tanks have to be

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this, we need to speak with a civil engineer or we don't know

way without having a little bit more information from Cuda,

what is the architect describing on, we don't know about

a lot about the sightlines on the top of the roof because we 1 2 don't know if the roof is going to be able to support extra structures and we don't know about the fence. So just to 3 comment before we vote, is that I have a little bit of a 4 5 struggle voting a certain way based on lack of information. COMMISSIONER: I think there has been several 6 motions made and seconds we've never voted on, but this is 7 going to be voted on when we come to the final thing on this, 9 I hope you've taken notes and remember what you've made 10 motions to and you do it at that time. I myself, I don't like the idea of 5:00 to 2:00. And it is a liquor store. 11 And it is a convenience store. Kids are going to be hanging 12 13 out there and making a lot of noise. And the trees lose 14 their leaves in the winter. That is not a good buffer. And 15 besides that, it doesn't have 35 foot variance between that 16 and residential property. CITY PLANNER: Still got to do the first motion that 17 18 Mr. Markenson made. 19 MR. CHAIRMAN: On the first motion was to change Item No. 10 to "including. " 2.0 21 COMMISSIONER: Take out the word "excluding" and 22 insert in lieu thereof the word "including." 23 MR. CHAIRMAN: So we had a motion and a second. 24 CITY PLANNER: Roll call. 25 (Roll call.)

1	(Motion carried.)
2	MR. CHAIRMAN: And the other motion was to put an
3	item 14, he retracted that.
4	CITY PLANNER: That is the only motion.
5	MR. CHAIRMAN: Okay. Any other discussion? Do we
6	feel we have enough information?
7	COMMISSIONER: Would you entertain a motion to place
8	this on the table until the next meeting? Give them an
9	opportunity to work on the fence and some of the other issues
10	that have been mentioned here, before we take a final vote on
11	this? I'm not making that motion.
12	MR. CHAIRMAN: I would entertain it, yeah. To make
13	sure that we get some of the concerns addressed with the
14	fence and some of the other issues that we had.
15	MR. CUDA: Can I address a couple of these concerns?
16	This is money for me.
17	MR. CHAIRMAN: I think we have enough. We need to
18	push it to another meeting.
19	CITY PLANNER: If that is what the planning
20	commission desires, we can continue this until the planning
21	commission meeting on December 3rd.
22	MR. CHAIRMAN: We are going to vote. Is that a roll
23	call?
24	CITY PLANNER: It will be a roll call.
25	MR. CHAIRMAN: I would entertain a motion to suspend

1	this until December 3rd.
2	(Roll call)
3	(Motion carried.)
4	MR. CHAIRMAN: Move this to the December 3rd agenda
5	and try and get some answers to the questions that are still
6	out there about the fence and other items. Okay. Thank you.
7	That concludes that item. Number 7 on the agenda is
8	communications from the City Council.
9	COUNCIL MEMBER: The Mayor's Christmas Tree lighting
10	is tomorrow night, so I hope you all can come to wish
11	everybody a happy Thanksgiving.
12	MR. CHAIRMAN: Next item is communication from city
13	staff. Do you have communication?
14	CITY PLANNER: I just want to thank everybody for
15	being here tonight, I appreciate it. I know the Chiefs and
16	Rams are playing right now I don't know whose winning but
17	hopefully it's Chiefs. Rams are winning. So it looks like
18	we will have the December 3rd planning commission meeting and
19	we will continue this then. That is all I have.
20	MR. CHAIRMAN: Next on the agenda is communications
21	from the Planning Commission members.
22	COMMISSIONER: Let's go home.
23	(Adjournment.)
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### CERTIFICATE

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I, Nicole M. Calcara, Certified Court Reporter, do hereby certify that on November 19, 2018, I was present and reported all of the proceedings in the Gladstone Planning Commission Hearing; I further certify that the foregoing 47 pages contain a complete and accurate transcription of the proceedings.

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Nicole M. Calcara, Court Reporter



ORIGINAL



# **Community Development Department**

Staff Report

Date: August 7, 2019, 2019

File #: 2019-008

Requested Action: Site Plan Revision, 6221 N Chestnut

Date of PC Consideration: August 19, 2019

Date of Council Consideration: September 9, 2019

Applicant: Pauc

Pauch, LLC

Owner:

Cascone Land Co

3737 N Oak Trfwy

Kansas City, MO 64116

Architect/

**3F30 Architects** 

**Engineer:** 

7501 NW Tiffany Springs Prkwy Ste 240

Kansas City, MO 64153

Address of Property: 6221 N Chestnut Avenue

## **Planning Information**

- Current Zoning: CP 3; Planned District, Commercial
- Zoning History: None Recent CP 3; Planned District, Commercial
- Planned Land Use: Commercial (Comprehensive Plan)
- <u>Surrounding Uses:</u> North Commercial; South Commercial; East Residential (Woodlands Community); West Commercial/N. Antioch Rd.
- Applicable Regulations: Zoning and Subdivision Ordinance and Comprehensive Plan

### Additional Information

- Public Utility Availability: Existing
- <u>Ingress/Egress:</u> Adequate traffic movement is provided via two existing access points on N. Chestnut Ave.
- <u>Traffic Impacts:</u> None, comparable/relative to the historical land use of the property (Public Safety Review)
- Parking Required: 25 spaces
- Parking Provided: 41 spaces
- Proposed On-Site Improvements: See staff analysis
- Proposed Landscaping: See site plans and analysis
- <u>Proposed Signage:</u> Proposed monument sign permitted separately when brand is selected

The applicant is requesting site plan approval for the purpose of constructing a convenience store/gas station at 6221 N Chestnut Avenue (formerly known as Tanners restaurant). Their plan is to significantly remodel the building, bring the structure up to code, and retrofit the property using a combination of EIFS, stone, artificial stone, and a metal awning for the exterior.

This project is a proposed site plan revision and not a re-zoning of the property. The current zoning of this property is CP-3 and is zoned for the proposed use.

The site plan shows additional trees and landscaping being planted on the eastern side of the property located directly behind the proposed convenience store/gas station, creating the required 35 feet buffer zone between the subject commercial and residential properties. There is also proposed landscaping on the western side of the property near the planned monument sign and green space between the two egress/ingress (N Chestnut Ave) access points. City Staff recommends that the trees and shrubs being planted on the property be native to Missouri by nature in an effort to aid in a better streetscape and survival.

In the BMP analysis conducted by Kaw Valley Engineering, runoff drains towards the southwest corner of the property and a bio-swale will be implemented to capture and treat runoff from the fueling area prior to runoff exiting the site.

The large mechanical equipment for this project is being relocated from the roof of the building to the ground and will be adequately screened from public view with materials similar in design to the rest of the structure. All screening will be reviewed via the building permit process.

Included in the Planning Commission packet is a letter from World Fuel Services describing the experience of Amir Nadeem Mehdi who will be the store operator for the proposed gas station and convenience store. Staff has also included a "retail mystery shop score" for the proposed operator for their various other locations.

There are residents in adjacent neighborhoods, located to the east of the subject property, that are opposed to this particular project. The Community Development Department has received multiple phone calls and a signed letter from the Woodlands HOA Board in opposition to this project in 2018 and 2019.

In 2018, Mr. Charles Cuda submitted a letter addressing issues and concerns of both the residents and Planning Commission. This letter is included in the Planning Commission.

On Monday, June 24, 2019 the project team for the proposed gas station and convenience store held a neighborhood meeting with the Woodlands community. It is City Staff's understanding that the Woodlands neighborhood is still in opposition to this proposed project.

During the Planning Commission and City Council hearings in 2018, there were concerns regarding decreased property values, potential crime, increased traffic and environmental impacts on the neighborhood.

### **Recommended Conditions**

City Staff recommends that the following conditions be considered if the Planning Commission and City Council choose to approve this project request:

- 1. Any and all disturbed areas shall be sodded.
- 2. All manicured grass and landscaped areas shall be irrigated and maintained in perpetuity.
- 3. All mechanical equipment located on the roof and the ground shall be screened from public view similar in design to the rest of the structure. All screening will be reviewed via the building permit process.
- 4. A compliant monument sign shall be used to serve the development. The monument sign will need a minimum of 240 sq. ft. of area landscaping around the sign.
- 5. Relocation of the trash dumpster to the North West corner of the parking lot away from the residential area adjacent to the property.
- 6. All exterior lighting on the site shall be LED and designed to reduce adverse impact on adjoining residential properties.
- 7. Outdoor lighting cannot be greater than 0.25 foot-candles and 10 feet beyond the property line.
- 8. Dumpster shall be enclosed with materials consistent with the primary building. Specific colors shall be submitted and approved as part of the building permit.
- 9. Trash service, store deliveries, and gasoline refilling (underground commercial gasoline tanks) shall occur between the hours of 7:00 a.m. to 10:00 p.m.
- 10. Tractor trailers, storage containers, and other commercial vehicles (including delivery trucks) shall not be parked or stored overnight on the premises.
- 11. No more than 50% of the glazed area of the building shall have signage.
- 12. Hours of operation are from 5:00 a.m. through 2:00 a.m. (Store will be closed from 2:00 a.m. through 5:00 a.m. Monday Sunday).
- 13. Signage compliant with the sign code shall be used. Signage shall be approved at the time of permitting.
- 14. Construct and maintain in perpetuity a 6 ft. PVC privacy fence, earth tone in color, along the eastern property line.
- 15. Maintain growth between the commercial privacy fence and the residential privacy fence in perpetuity.

#### Recommendation

City Staff recommends that the request be **APPROVED** contingent upon the conditions listed above.

### **DEVELOPMENT APPLICATION**



# **CITY OF GLADSTONE**

7010 N HOLMES STREET GLADSTONE, MISSOURI 64118 PHONE: 436-4110 FAX: 436-2228

N80 0				
			File #:	
			Date:	
Application Type:				
☐ Zoning Char	Permit (\$500) age (\$500) vision (\$500)		Right-of-Way Vac Variance - BZA (\$ Final Plat/Replat (\$	S200)
Address of Action: Legal Description:	6221 N. Chestn	ut Ave	nue	
needed.	See Attached L	egal		
Proposed Change:	Site Plan Revis	ion (ne	zoning change) to p	permit the
	redevelopment	of the	existing building fro	m the restaurant use
	to convenience	store v	with gas sales.	
Address 45101	nes C. Bowers, J Belleview Avenue	e, Suite	se Frets White Goss 300, Kansas City, N 9201 E-Mail: jbow	10 64111
☐ Property Owner ( Company Address 3737 N Phone	l. Oak Trafficway	, Kans	Cascone Land Co.  as City, MO 64116 E-Mail:	
Company 3F30 Address 7501 N Phone 816-801-	Architects IW Tiffany Sprin	gs Park	tway, Suite 240, Kan 7074 E-Mail: bruot	sas City, MO 64153
applicant's Signature	aires (	Bu	Date _	5/30/2019
Jam	es C. Bowers, Jr.,	ALLON	ICY TOF FAUCH, LLC	

1

#### LEGAL DESCRIPTION

TITLE COMMITMENT SCHEDULE A DESCRIPTION:
LOT 3, KENDALLWOOD CENTER, A SUBDIVISION IN GLADSTONE, CLAY COUNTY, MISSOURI, EXCEPT THAT PART COMMENCING AT THE NORTHWEST CORNER OF SAID LOT 3; THENCE NORTH 0°31'58" EAST, 4.53 FEET TO THE POINT OF BEGINNING, THENCE SOUTH 89°34'38" EAST, 152.60 FEET TO A POINT BEING 4.82 FEET NORTHERLY OF THE NORTHEAST CORNER OF SAID LOT 3; THENCE SOUTH 0°19'01" WEST, 79.82 FEET ALONG THE EAST LINE OF SAID LOT 3 AND THE EXTENSION THEREOF; THENCE NORTH 89°28'02" WEST, 152.90 FEET TO A POINT ON THE WEST LINE OF SAID LOT 3; THENCE NORTH 0°31'58" EAST, 79.53 FEET ALONG THE WEST LINE OF SAID LOT 3 AND THE EXTENSION THEREOF TO THE POINT OF BEGINNING.

## DEVELOPMENT APPLICATION

# OWNER'S AUTHORIZATION

(Owner's name)			Pauch LLC through its (Applicant's name)
to apply for the following t	action on my proj	ecity at	6221 N. Chestnut, Gladstone
a. Rezone from	allow and a second address of the	to	-
b. Site Plan Revision	X		
<ul><li>c. Special Use Permit</li><li>d. Variance</li></ul>	-		
a. Plat/Panlat			- 1 <sup>ee</sup> -
Date:5/29/2019	Owner's Sign.		Cascone Land Co.
	NÜTAKIZ	ATTON	
ate of MISSOURI	-		
unty of Clay	_		
bscribed and sworn before m	e this 29M	lav of 1	Yay
Notary's	s Signature:	ZV	
Му Сот	mission expires:	9.0	26.97
	(seal	)	

NOTARY 2. SEAL OF MIT ARIELLE SAULSBURY My Commission Expires September 5, 2922 Clay County Commission #18128014



7501 NW TIFFANY SPRINGS PKWY, STE 240 KANSAS CITY, MO 64153 (p) 816-801-7070 (f) 816-801-7074 Contact: Bryan Rudff ARCHITECTS

CIVIL ENGINEERING Kaw Valley Engineering

8040 N Oak Trafficway Kansas City, MO 64118 (816) 468-5858 Contact:

# GLADSTONE, MO *'*3

61.42.8 PLANNING SET

NATU	CHESTAL	'N	6221
	OPES		



GRADING PLAN DRAINAGE AREA MAPS

2 2

FLOOR PLAN ELEVATIONS

A101 A102 A103

CERTIFICATE OF AUTHORITY # A-2007030598

# REMODEL - DEVELOPMENT 6221 N. CHESTNUT AVE. GLADSTONE, MO

LANDSCAPE PLAN ENLARGED LANDSCAPE PLAN LANDSCAPE PLAN

L101.1 L101.1 L101.2

PHOTOMETRIC PLAN

**NEW CONVENIENCE STORE & FUEL** 

APPLICABLE CODES ] 2015 International Building Code 2015 International Existing Building Code 2015 International Flumbing Code 2015 International Mechanical Code
---

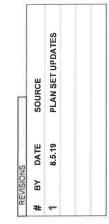
54,239SF / 125 A COMBINED

4952± 4700± CP-3 N/A

T FLOOR AREA - GROSS DING AND SITE DATA

40+ 28

@ 1:200 +4 EMPLOYEE

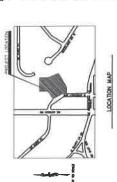


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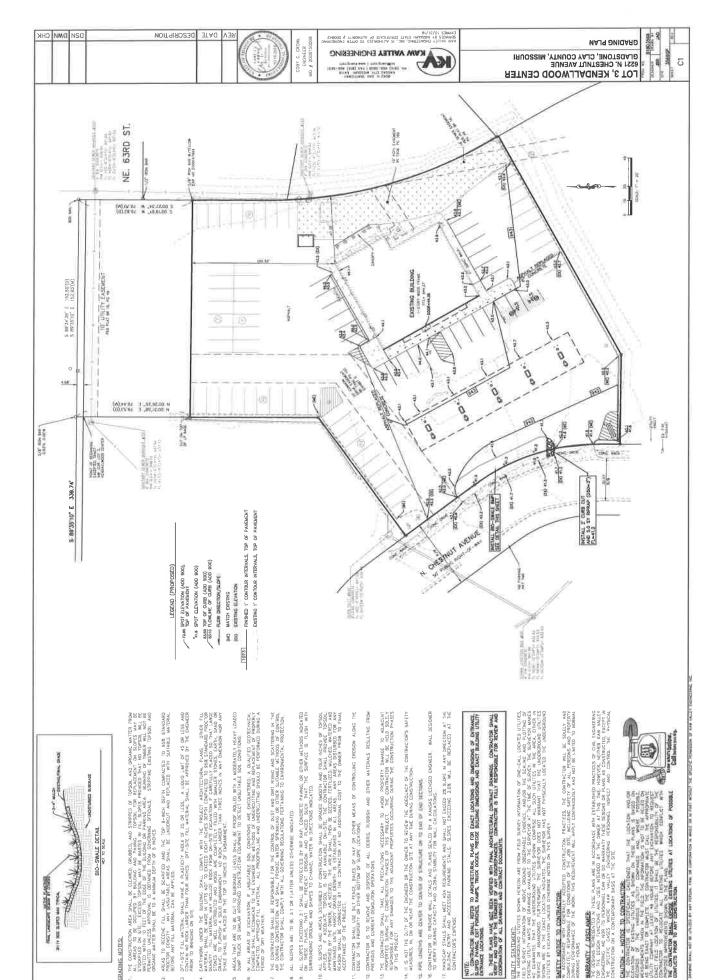
18-01**2** 

MEETING GC PRE-BID X	100			BOLLONG AND SILE DATA
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PRE-CONSTRUCTION X	×	×	×	ELOOP APEA - NET
PRE-SLAB INSTALL X	×		×	SECOND EL DOB ABEA
REGULAR SITE MEET. X	×	×	×	SCOOK LOOK AND
PRE-MECHANICAL X	×	×	×	CONTROL DECLINED
PRE-FUEL X	×	×	×	DABKING REGOINED
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	CC TO PROVIDE CALENDAR AT THE BEGINNG OF THE PROJECT	SCHED		ETINGS	
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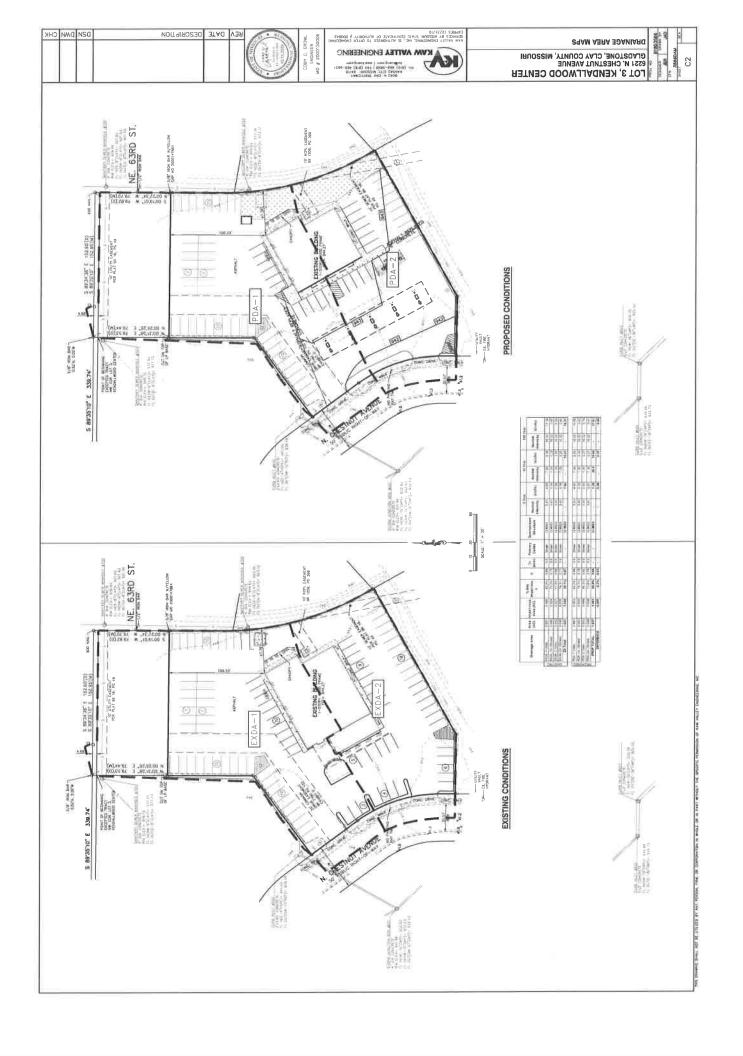
PRE-BID PRE-CONSTRU PRE-SLAB INST REGULAR SITE PRE-MECHANIC PRE-FUEL	PRE-BID PRE-CONSTRU PRE-CONSTRU PRE-CONSTRU PRE-CONSTRU PRE-FUEL
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PRE-SLAB INST REGULAR SITE PRE-MECHANIC PRE-FUEL	PRE-SLAB INST REGULAR SITE PRE-MECHANIC PRE-FUEL
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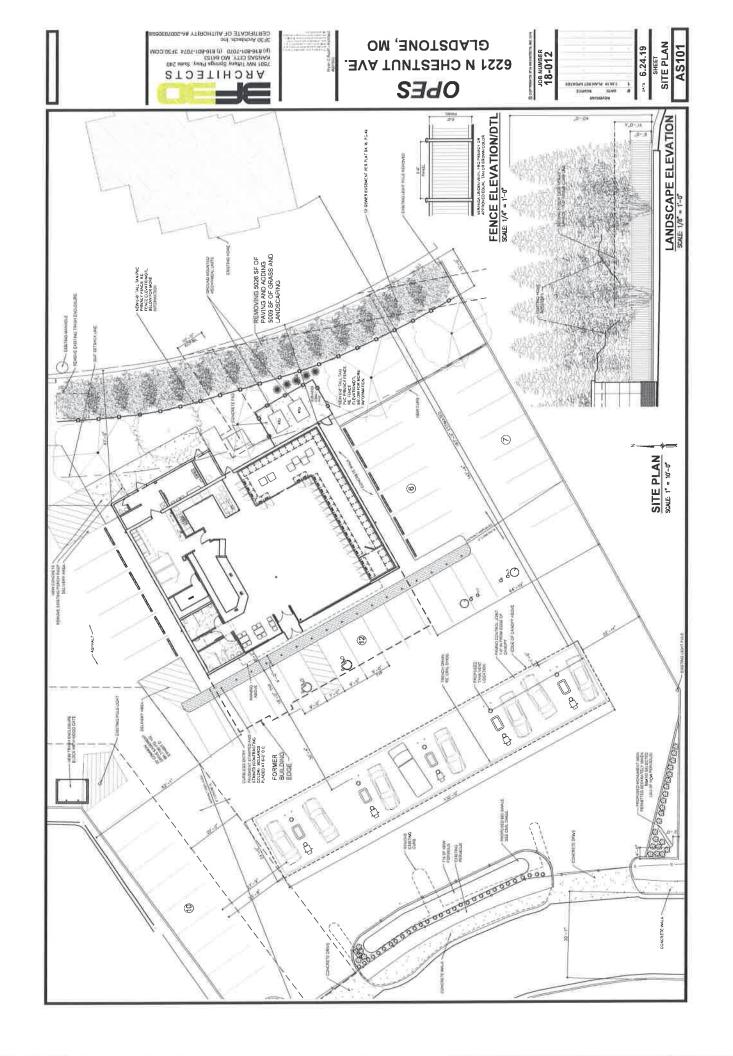


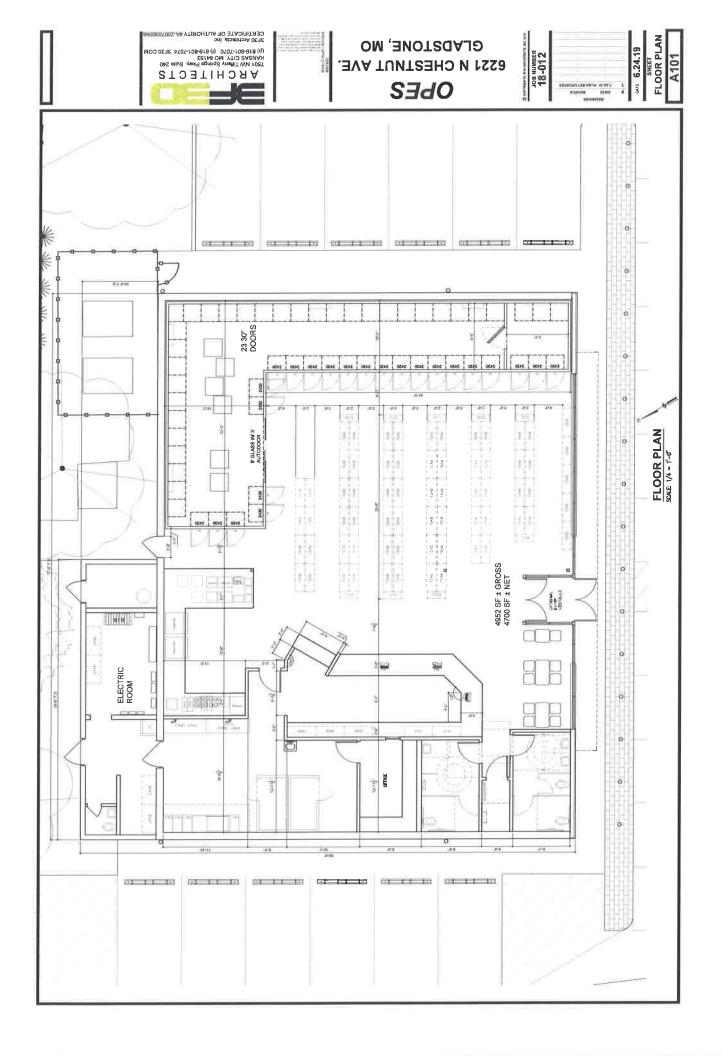
GRADING NOTES

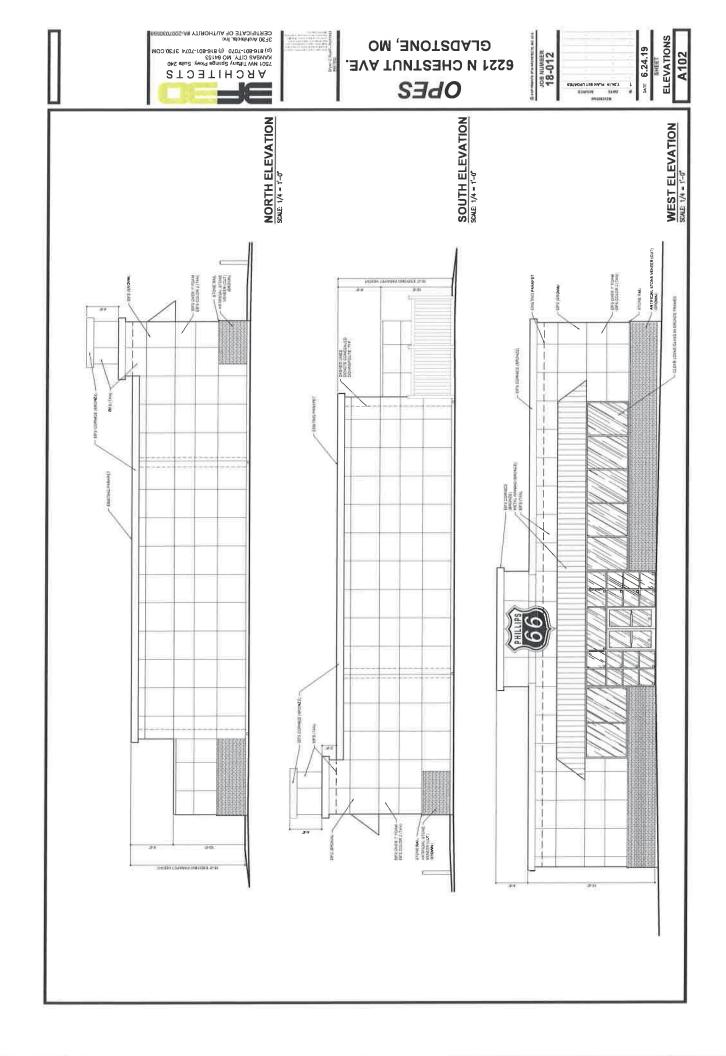
MARRANTY / DISCLAIMER

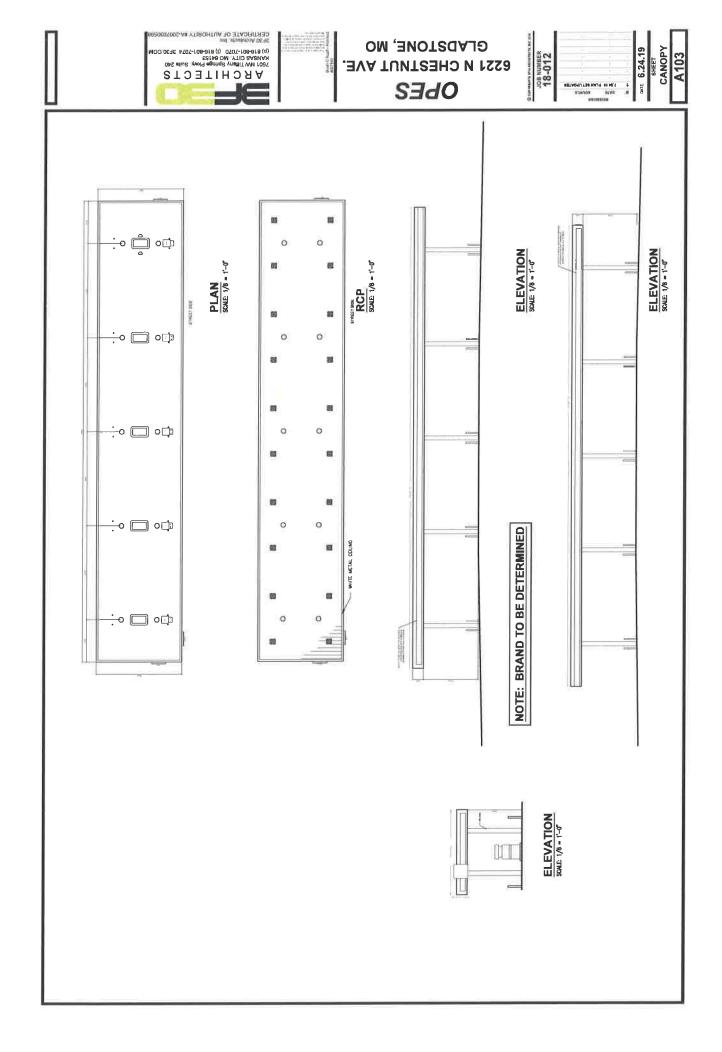
UTILITY STATEMENT: THE UNDERGROUND UTIL

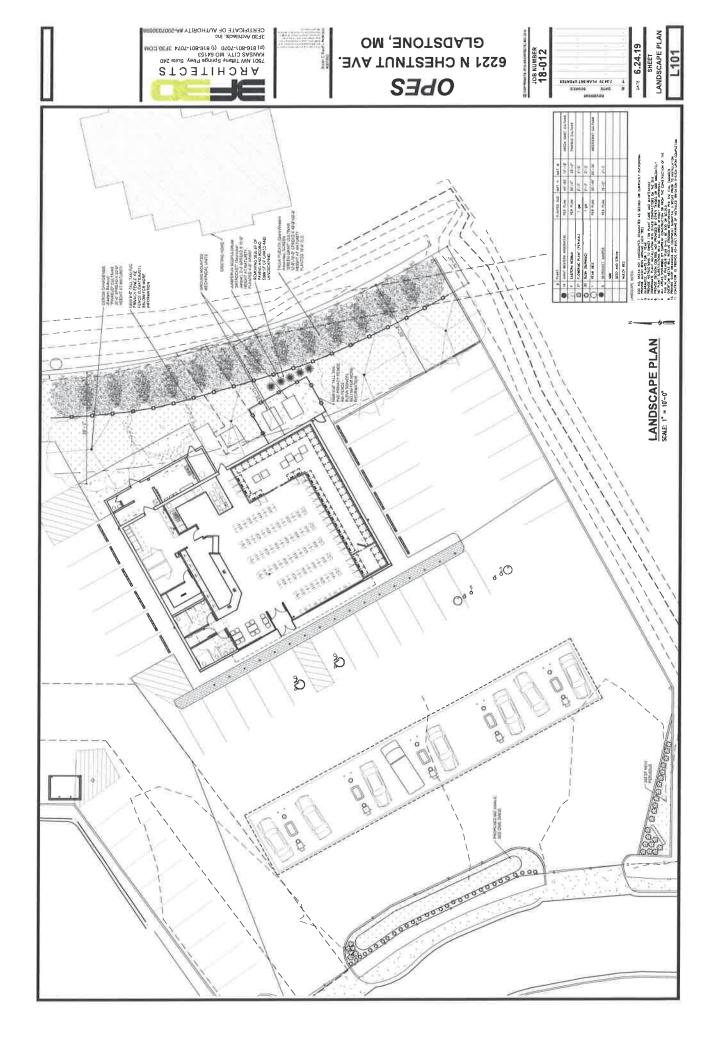


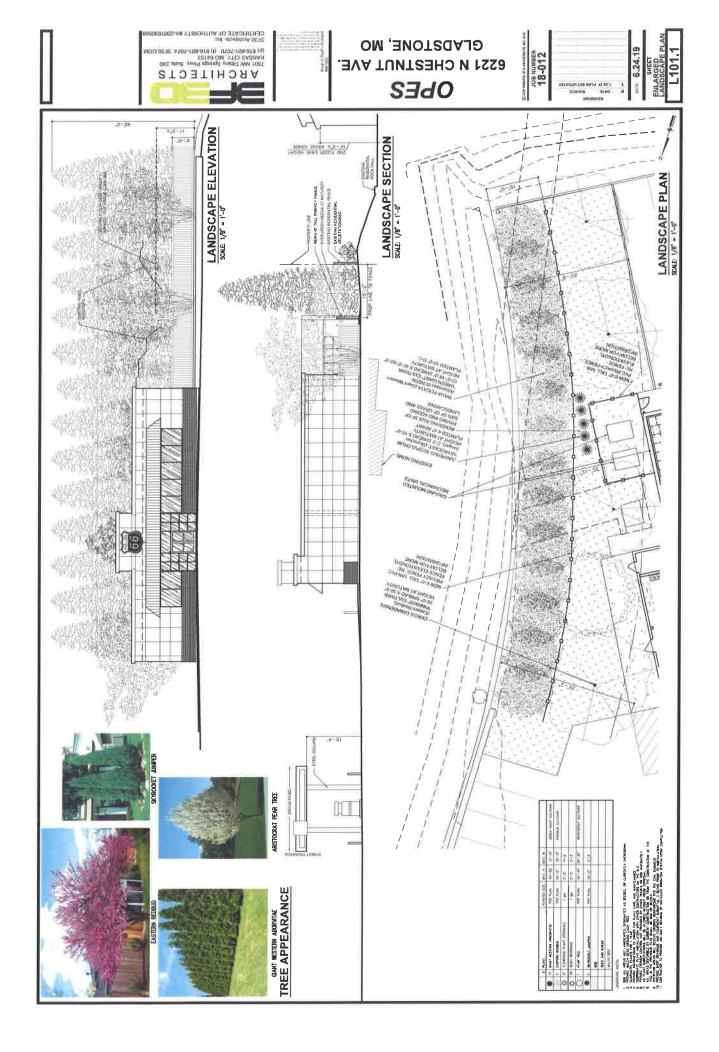


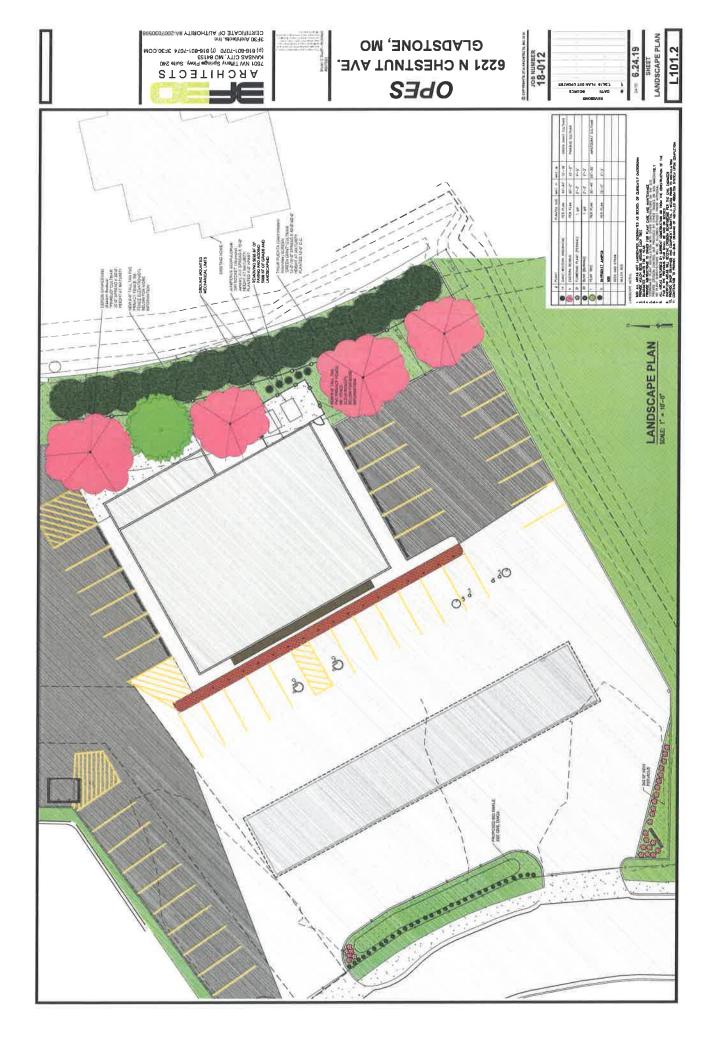


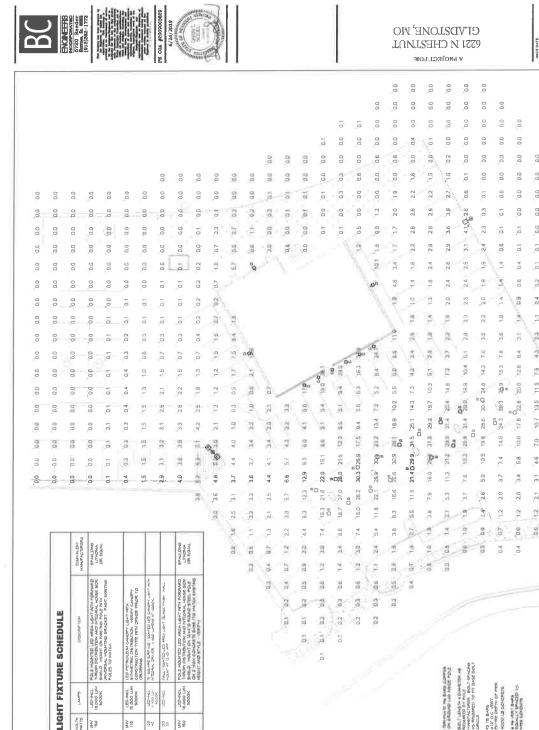












1-300 LUTT

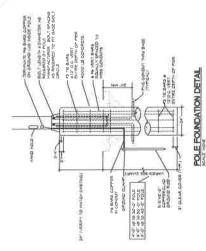
110

505-LED-11-90-DRH-50K-WHT

LS)
WRN-LED-16L-8L-TWN-50-70CR-8RZ-ILBKA-VRB-8RZ
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CATACO WALLE



# **AGENDA**



# PLANNING COMMISSION GLADSTONE, MISSOURI

Monday, July 1, 2019 - Cancelled

TO:

Planning Commission

FROM:

Community Development Department

DATE:

July 1, 2019

SUBJECT: Meeting Cancellation

The Planning Commission meeting scheduled for Monday, July 1st has been cancelled. The applicant has requested a postponement until the Monday, August 19th meeting. This will allow them some additional time to coordinate with the neighbors regarding the project at 6221 N Chestnut Avenue.

If you have any questions regarding this notice, please call 423-4110. Thank you.

Posted: 08/29/2019 by Cheryl Lamb, Administrative Assistant

# **AGENDA**



# PLANNING COMMISSION GLADSTONE, MISSOURI

Tuesday, September 3, 2019 - Cancelled

TO:

Planning Commission

FROM:

Community Development Department

DATE:

September 3, 2019

SUBJECT:

Meeting Cancellation

The Planning Commission meeting scheduled for Tuesday, September 3<sup>rd</sup> has been cancelled.

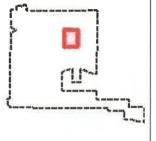
If you have any questions regarding this notice, please call 423-4110. Thank you.

Posted: 08/29/2019 by Cheryl Lamb, Administrative Assistant



# Gladstone, MO





# Legend

KCPL Lights

Gladstone Lights School Point

Bike Parking

**Bus Stop** 

Point of Interest

Church

Apartment Point

Edge Of Pavement Street Centerline

Driveway

City Limits

House Number Parcel

**Building Footprint** 

School Polygon

City Park

Villages

Apartment Polygon

# Notes

File #2019-008 6221 N Chestnut 185' Properties

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION

TO:

Owners of Property Within 185' & Other Interested Parties

FROM:

Community Development Department

DATE:

June 10, 2019

SUBJECT:

Site Plan Revision, 6221 N Chestnut Avenue, Gladstone, MO 64119

## **Public Hearing File #2019-008**

Public notice is hereby given that the Gladstone Planning Commission will meet on Monday, July 1, 2019 at 7:00 pm for a Site Plan Revision for the property located 6221 N Chestnut Avenue. The property is legally described as KENDALLWOOD CENTER PT LT 3 BEG SW COR LT 3, E63, NE177.23, NLY217.73, W152.9, S84.97, SW103.59, SELY168.81 TO POB, in the City of Gladstone, Clay County, Missouri.

Applicant:

Pauch, LLC

Owner:

Cascone Land Co

The applicant is requesting to modify the site and building (formerly Tanners Restaurant) to a proposed Convenience Store.

The City Council will hold its public hearing on Monday, July 22, 2019 at 7:30 pm.

This letter is being sent to you because you are within 185' of the above address. If you have any questions, please call the Community Development Department at 423-4110.

Thank you.

# ROUSE FRETS WHITE GOSS GENTILE RHODES, P.C.

MELISSA VANCRUM DIRECT DIAL: 913.647.3211 MVANCRUM@ROUSEPC.COM

August 21, 2019

VIA EMAIL

Austin Greer
General Administration & Community Development
City of Gladstone
7010 N. Holmes Street
Gladstone, MO 64118
Austing@gladstone.mo.us

Re: 6221 N. Chestnut Avenue City Council Continuance

Dear Mr. Greer:

I am writing on behalf of my client, Pauch, LLC, to request a continuance of the hearing for a site plan revision for 6221 N. Chestnut Avenue currently scheduled before the Gladstone City Council on September 9, 2019. We would like to continue this item for two weeks until the September 23, 2019 City Council meeting due to a previously scheduled conflict of the project's architect.

Please let me know as soon as this requested continuance and rescheduled hearing date have been confirmed. Feel free to contact me with any questions or for any additional information.

Best Regards,

ROUSE FRETS WHITE GOSS GENTILE RHODES, P.C.

Melissa L. Vancrum

MLV/cmc

Cc: Scott Wingerson (scottw@gladstone.mo.us)

Chuck Cuda, Pauch, LLC

James C. Bowers, Jr., Rouse Frets White Goss Gentile Rhodes, P.C.



# **All-America City**



10

Owners of Property Within 185' & Other Interested Parties

FROM:

Community Development Department

DATE

August 29, 2019

SUBJECT:

Site Plan Revision, 6221 N Chestnut Avenue, Gladstone, MO 64119

## Public Hearing File #2019-008

The City Council public hearing for File #2019-008, 6221 N Chestnut Avenue has been postponed at the request of the applicant.

The City Council will hold its public hearing on Monday, September 23, 2019 at 7:30pm.

Applicant:

Pauch, LLC

Owner:

Cascone Land Co

The applicant is requesting to modify the site and building (formerly Tanners Restaurant) to a proposed Convenience Store.

This letter is being sent to you as a courtesy because you are within 185' of the above address.

If you have any questions, please call the Community Development Department at 423-4110.

Thank you.



Office: 816.468.5858
Fax: 816.468.6651
Web: www.kveng.com
Address: 8040 N. Oak Trafficway
Kansas City, MO 64118

July 18, 2019

B18D3566

Charles Cuda OPES Commercial Real Estate 6051 N. Chestnut, Suite B Gladstone, MO 64119

Re:

Storm Water Drainage Letter Lot 3, Kendallwood Center 6221 N Chestnut Avenue Gladstone, Missouri

Mr. Cuda:

As requested, I visited the above referenced site as a representative of Kaw Valley Engineering, Inc. (KVE) to assess the storm water runoff interface with the residential parcel at 127 Woodlands Drive West.

The residential parcel is located east of the commercial building that is located at the southern portion of Lot 3, Kendallwood Center. The commercial site, in the vicinity of the residential parcel, is mostly curbed with a small portion of the parking lot perimeter consisting of wheel stops at the northern area. The grade within Lot 3 east of the parking lot, between the commercial site and the residential property, is at least six inches higher in elevation from the adjacent pavement. In addition, the general slope of the site is either to the west or to the south. For the portion of the site that drains south, the curb at the south end of the site directs runoff to the west.

It is my professional opinion that the commercial site, as it exists today, contributes an insignificant rate of storm runoff to the neighboring residential property. Development of the site will not adversely impact this condition.

Respectfully Submitted,

Kaw Valley Engineering, Inc.

ARLING

NUMBER

ONAL

Martin T. Arling, P.E.

Principal



Office: 816.468.5858 Fax: 816.468.6651

**Web:** www.kveng.com **Address:** 8040 North Oak Trafficway Kansas City, MO 64118

Initial Submittal: October 15, 2018

B17D35667

Re: Storm Water Drainage Letter

Lot 3, Kendallwood Center 6221 N. Chestnut Avenue Gladstone, Clay County, Missouri

Kaw Valley Engineering, Inc., on behalf of PAUCH, LLC, has prepared this Storm Water Drainage Letter to evaluate the impact of proposed site work on approximately 1.25 acres of land located along N. Chestnut Avenue in Gladstone, Missouri. The proposed scope of work includes converting the existing site to a convenience store and passenger vehicle fueling station.

#### **GENERAL INFORMATION & EXISTING SITE CONDITIONS**

The project site is located at 6221 N. Chestnut Avenue in Kendallwood Center, in Gladstone, Missouri. The site is bound by N. Chestnut Avenue to the west, existing businesses to the north and south, and residential properties to the east. The site is approximately 1.25 acres and currently contains an existing restaurant building and associated parking. The existing site generally drains to the west by overland and shallow concentrated flow where storm water enters the public storm sewer along N. Chestnut Avenue.

Runoff analysis was completed utilizing the Kansas City Metropolitan Chapter of the American Public Works Association Design Criteria, Section 5600 and its applicable supplements. The Rational Method was used to determine and compare peak runoff rates for the existing and proposed site conditions. This analysis was performed for the 2, 10, and 100-year storm events. A 5-minute Time of Concentration was used for all on site calculations. The Time of Concentration to the existing enclosed storm drainage system was calculated based on Time of Concentration calculations per APWA Section 5600. Runoff coefficient values of 0.3 and 0.9 were used for pervious and impervious surfaces, respectively. Runoff calculations for the existing and proposed conditions are presented in Table 1 and drainage area maps are presented in Attachment A.

#### PROPOSED SITE CONDITIONS & BMP ANALYSIS

The project scope consists of modifying the existing building and site to a convenience store and fueling station. The existing parking lot will be reconstructed to accommodate the proposed site layout. The improved site will decrease the site impervious surface and reduce the overall site runoff. No on-site detention will be required due to the decrease impervious surface and site runoff. The proposed site will maintain the drainage patterns of the existing conditions.

A best management practice (BMP) will be installed to assist in removal of on-site pollutants from the storm water runoff prior to runoff exiting the site. BMP analysis was completed using the 2012 MARC BMP Manual. Per the 2012 MARC BMP Manual, fueling stations are considered a pollutant "hot-spot" and it is recommended that runoff from the fueling areas be isolated and treated prior to exiting the site. A bio-swale is proposed at the west of the property between the site drive approaches. The bio-swale will capture runoff from the fueling area (approximately 0.18 acres) and treat the runoff via infiltration and plant absorption prior to exiting the site. The associated BMP calculation worksheets are included in Attachment B. Runoff

calculations for the existing and proposed conditions are presented in Table 1 and drainage area maps are presented in Attachment A.

#### **SUMMARY AND CONCLUSION**

As shown in Table 1, the project proposes to decrease the overall site runoff due to the decrease in impervious surface. A BMP bio-swale will be implemented to capture and treat runoff from the fueling area prior to runoff exiting the site.

Respectfully Submitted,

NUMBER -2000150006

Kaw Valley Engineering

Coby C. Crowl, Project Manager

Johnson Rowland, EIT

John Rowland

TABLE 1: EXISTING AND PROPOPOSED DRAINAGE ANALYSIS AND COMPARISON

									2 Year	<u></u>	10 Year	ar	100 Year	ar
	Drainage Area	Area (AC)	Impervious Area (AC)	% Site Impervious	O	Tc (min)	Primary Outlet	Downstream Structure	Rainfall Intensity	Q (cfs)	Rainfall Intensity	Q (cfs)	Rainfall Intensity	Q (cfs)
	EXDA-1 (Site)	0.991	0.950	95.9%	0.88	5.0	Street	CI #603	5.41	4.69	7.35	6.38	10.32	11.19
NC	EXDA-1A (Street)	0.045	0.034	75.2%	0.75	5.0	Street	CI #603	5.41	0.18	7.35	0.25	10.32	0.43
ITS	EXDA-2 (Site)	0.543	0.527	%0.76	0.88	5.0	Street	CI #603	5.41	2.59	7.35	3.52	10.32	6.18
EXI	EXDA-2A (Street)	0.048	0.035	74.3%	0.75	5.0	Street	CI #603	5.41	0.19	7.35	0.26	10.32	0.46
	EX Total	1.627	1.546	95.1%	0.87	179		CI #603	٠	7.66	(4	10.41	:14	18.27
C	PDA-1 (Site)	0.991	0.923	93.2%	0.86	5.0	Street	CI #603	5.41	4.60	7.35	6.26	10.32	10.98
IBS	PDA-1A (Street)	0.043	0.033	76.1%	0.76	5.0	Street	CI #603	5.41	0.18	7.35	0.24	10.32	0.42
ОЬО	PDA-2 (Site)	0.543	0.469	86.3%	0.82	5.0	Street	CI #603	5.41	2.40	7.35	3.27	10.32	5.74
эВс	PDA-2A (Street)	0.049	0.036	73.6%	0.74	5.0	Street	CI #603	5.41	0.20	7.35	0.27	10.32	0.47
4	PROP TOTAL	1.627	1.461	89.8%	0.84			CI #603	i	7.38	29.4	10.04	:#:	17.61
	DIFFERENCE	Щ	-0.085	-5.2%	-0.03	22			*	-0.28	•	-0.37		-0.66

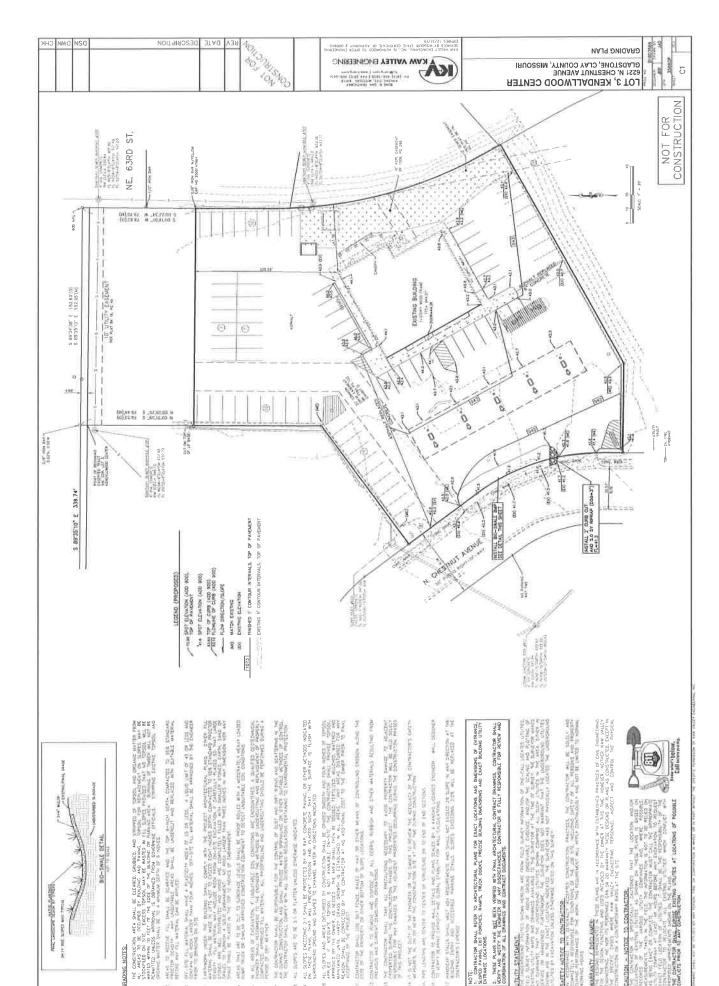
## **ATTACHMENTS**

ATTACHMENT A:

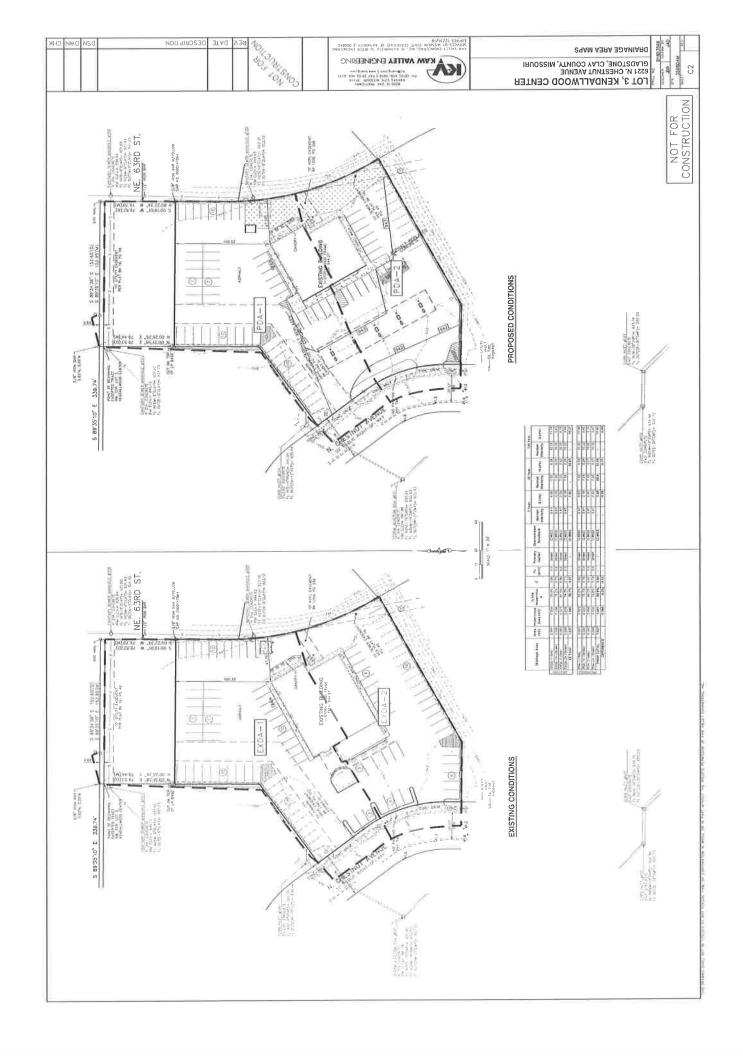
PROPOSED GRADING PLAN

EXISTING AND PROPOSED CONDITIONS DRAINAGE AREA MAPS

ATTACHMENT B: BMP WORKSHEETS



UTALTY STATEMENT



#### WORKSHEET 1A: REQUIRED LEVEL OF SERVICE - DEVELOPED SITE

Location: Lot 3 - Kendall Wood: 6221 N Chestnut

Project: B18D3566

0.859	
Acres	
0.031	
0.828	
"1A" Total: 0.859	
Acres	
0,828	
W	
"18" Total: 0.828	
ss "1B" Total "1C" 0.031	
uring (LC)	
rvice (LS)	
Area (ac.)	
Acres	
0.743	
0.743	
0.743	
0.743	
"2A" Total: 0.743	
"2A" Total: 0.743	
"2A" Total: 0.743	
"2A" Total: 0.743 "1B" Total: 0.828	
"2A" Total: 0.743  "1B" Total: 0.828  ss "18" Total "2C" -0.085	
"2A" Total: 0.743 "1B" Total: 0.828	duceo
"2A" Total: 0.743  "1B" Total: 0.828  ss "18" Total "2C" -0.085	ducee
"2A" Total: 0.743  "1B" Total: 0.828  ss "1B" Total "2C" -0.085  equired Treatment Area "2C"/"1C" x 100 -275.94 Impervious Area Rea	ducec
"2A" Total: 0.743  "1B" Total: 0.828  ss "1B" Total "2C" -0.085  equired Treatment Area "2C"/"1C" x 100 -275.94 Impervious Area Rea	ducec
"2A" Total: 0.743  "1B" Total: 0.828  ss "1B" Total "2C" -0.085  equired Treatment Area "2C"/"1C" x 100 (Round to Integer) NA	duceo
	0.031   0.828

By: JBR Date: 10/12/2018 Checked: CCC Date: 10/12/2018

### WORKSHEET 2: DEVELOP MITIGATION PACKAGE(S) THAT MEET THE REQUIRED LS

Project: B18D3566			Ву:	JBR	Date:	10/12/2018
Location: Lot 3 - Kendall Wood: 6221 N	N Chestnut		Checked:	CCC	Date:	10/12/2018
Sheet of						
1. Required LS (New Development, Wksl	-				0.092	
Note: Various BMPs may alter CN of prop	osed developn	nent, and LS;	recalculate l	ooth if applical	ble.	
2. Proposed BMP Option Package No.	1					
Required Treatment Area Per Wrksht 1A =	0.031 acres					
		VR from				
	Treatment	Table 4.4 or	Product of			
Cover/BMP Description	Area	4.61	VR x Area			
Vegetated Filter Strip/Bio-Swale	0.031	5.00	0.155	5		
Additional Treatment Area	0.149	5.00		-		
			0.00	ם		
			0.00	פ		
			0.00			
Untreated	0.00		0.00	<u> </u>		
Total <sup>2</sup>	0.031	Totals:	0.16	5		
	V	Veighted VR:	5.00	= total produ	ıct/total A	
				_		
VR calculated for final BMP only in	Treatment Tra	ain				
Total treatment area cannot exceed	ed 100 percent	of the actual	site area.			
* Blank in Redevelopment						
Meets required LS (Yes/No)?	YES	(If No, or if	additional o	ptions are beir	ng	
. , , , ,			eed below)			



World Fuel Services Corporation 9800 NW 41<sup>51</sup> Street Suite 400 Miami, FL 33178 www.wfscorp.com

November 6, 2018

Mr. Austin Greer

City of Gladstone

RE: Experience letter Amir Nadeem Mehdi

We are excited to provide you with an experience letter for Amir Mehdi. He has been a long time World Fuel Services customer who is very accomplished in his business. He has been in the convenience store business since 1997 and has been a customer of ours for 11 years. He runs a professional company and is financially viable. We are proud of our association with him! His locations consistently score in the upper 90's on his performance evaluations with Phillips 66 and I am sure will continue to do so. He is an asset to his community and will be the same for the City of Gladstone!

Should you have any questions or require further information, please contact me at 785-224-9373 and I will be happy to respond quickly.

Sincerely,

Susie Coleman

World Fuel Services

Account Manager

scoleman@wfscorp.com



# **Visit Details**

Visit Period:

2018-10

Date of Visit:

10/31/2018

Time of Day

7 - 10 am

Job Number:

16843171

Cashier name or description:

₩ TJ

Location:

883004 - Phillips 66 - KC LIONS

Address:

5425 PROSPECT

City:

KANSAS CITY

MO

State:

[View All Photos]

**Total Score** 

91.0%

**Shop Result: Pass** 

**Category Score** 

Category	Points	Out of
CORE EXPERIENCE	6	6
ATTENTION TO DETAIL	18	18
FUELING EXPERIENCE	28	37
SAFETY EXPERIENCE	8	8
RESTROOM EXPERIENCE	10	10
MERCHANDISING EXPERIENCE	19	19
CASHIER EXPERIENCE	8	8

CORE	EXPERIENCE	100.0% 6/6
34a	Refused Audit comments:	n/a
35	Does the primary fueling area have a canopy? Mark one only:  Yes	1/1
36	Was the location's primary fueling area canopy/canopies branded with approved logos and correctly painted? Mark one only:	1/1
	Yes	



37	Were all protector poles, bollards, raised end caps, curbs, and columns in the primary fueling area painted the approved colors? Mark one only:	1/1
	Yes	
39	Did each fuel dispenser in the primary fueling area meet all branding requirements? Mark one only:	1/1
	Yes	
39d	Was the Phillips 66 "Ninety years of Performance Gas and still going strong" pump topper present?	n/a
	Yes	
40	Did the Main station ID price sign meet all required elements? Mark one only:	1/1
	Yes	
41.1	Was in and around the location free of selling any illegal drugs, synthetic drugs, or drug paraphernalia? Mark one only:	1/1
	Yes	
ATTE	NTION TO DETAIL	100.0 18/1
ATTE	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:	
	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand	18/1
01	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:	18/1
01	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes	6/6
D1 D2	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes  Was your cashier wearing a name badge or have a name on his/her shirt? Mark one only:	6/6
D1 D2	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes  Was your cashier wearing a name badge or have a name on his/her shirt? Mark one only:  Yes  Was the Main station ID price sign well maintained, and free of banners and vendor signs? Mark	6/6
	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes  Was your cashier wearing a name badge or have a name on his/her shirt? Mark one only:  Yes  Was the Main station ID price sign well maintained, and free of banners and vendor signs? Mark one only:	6/6
01	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes  Was your cashier wearing a name badge or have a name on his/her shirt? Mark one only:  Yes  Was the Main station ID price sign well maintained, and free of banners and vendor signs? Mark one only:  Yes  Were the canopy and canopy columns mainly clean, undamaged, and free of bird/wasp nests, and the entire fuel island free of any banners/flags/vendor signs (excluding Grand Opening banners)?	18/1 6/6 2/2 5/5
01	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes  Was your cashier wearing a name badge or have a name on his/her shirt? Mark one only:  Yes  Was the Main station ID price sign well maintained, and free of banners and vendor signs? Mark one only:  Yes  Were the canopy and canopy columns mainly clean, undamaged, and free of bird/wasp nests, and the entire fuel island free of any banners/flags/vendor signs (excluding Grand Opening banners)? Mark one only:	18/1 6/6 2/2 5/5
01	*** Was your cashier wearing neat and clean clothing with the gas or convenience store brand logo/name visible? Mark one only:  Yes  Was your cashier wearing a name badge or have a name on his/her shirt? Mark one only:  Yes  Was the Main station ID price sign well maintained, and free of banners and vendor signs? Mark one only:  Yes  Were the canopy and canopy columns mainly clean, undamaged, and free of bird/wasp nests, and the entire fuel island free of any banners/flags/vendor signs (excluding Grand Opening banners)? Mark one only:  Yes	18/1 6/6 2/2 5/5





No

	9 7 - 10 am	
940	Market:	n/a
	<ul><li>Other</li></ul>	
950	Brand/Image	n/a
	Phillips 66	
960	Closed Location- Failed Report	n/a
	No	
FUELIN	IG EXPERIENCE	75. <b>7</b> % 28 <b>/37</b>
07	Was the fuel island you used clean with the paint in good condition? A few small chips from wear and tear are acceptable. Mark one only:	4/4
	Yes	
08	*** Was the fuel dispenser in the primary fueling area that you used clean and free of the following issues? For audits, did all fuel dispensers in the primary fueling area have pump toppers and We Honor decals that were current and in good condition, along with "Fuel us with Feedback" signage? Mark one only:	0/5
	<ul><li>No</li></ul>	
08a	If No to Q8, mark all that apply:	n/a
	<ul> <li>i. Pump topper/Video pump topper/Eclipse POS insert/Side support sign: Expired advertisement displayed</li> </ul>	
	q. No "Fuel us with Feedback" survey signage present at one or more pumps	
08b	Which pump did you use?	n/a
	4	
08c	Was the Phillips 66, Conoco, or 76-branded security tape utilized on the fuel dispensers? Mark one only:	n/a
	No	
09	Did you see 2 or more fuel products and/or nozzles out of order/out of gas in the primary fueling area? Mark one only:	5/5
	No	
10.1	Was the credit card reader at your fuel dispenser available and appear to be working, and did it print a receipt for your fuel purchase (if a credit or debit card was used)? Mark one only:	0/4





0a.1	If No, mark one only:		n/a
	o d. Did not print a receipt when a credit or debit card was used		
oa.2	If a receipt did not print, what type of message did you see on the screen? Mark one only:		n/a
	c. Indicated a receipt printed, but a receipt did not print		
1	Were the fueling area, parking lot, and sidewalk area clean and well maintained overall? Mark one only:		4/4
	Yes		
2	Was an exterior trash can (free standing or part of a window washing unit) clean, available near your pump, in good condition, and have enough room for more trash? Mark one only:		1/1
	Yes		
3	Was the store or kiosk building exterior clean and free of the following conditions? Mark one only:		1/1
	Yes		
4	If the location has landscaping and/or flower pots, were they well maintained? Mark one only:		4/4
	Yes		
5	Was air available, well marked, and did it appear to be in working order? Mark one only:		4/4
	e Yes		
6	*** Were well-maintained squeegees, paper towels, and clean water/solution available near your fuel dispenser for washing windshields? Mark one only:	E	5/5
	Yes		
AFET	Y EXPERIENCE		100.0%
7	If this location has a convenience store, were the store windows at least 50% clear of non-store or fuel-branded signs or other obstructions when looking in from outside? Mark one only:		2/2
	Yes		
8 6 8	If after dark, was the exterior bright and well lit with building lights, lot lights, main station ID sign lights, and canopy lights turned on and working? Mark one only:	Ī	6/6
	● N/A		
ECTD	ROOM EXPERIENCE		100. <mark>0</mark> %





9	Was a restroom available and open to customers? Mark one only:	
	Yes	
ь	Which restroom did you evaluate? Mark one only:	n/a
	a. Men's	
0	*** Was the restroom clean and free of the following issues? Mark one only:	4/4
	Yes	
	Was the restroom fully stocked? Mark one only:	2/2
	Yes	
2	Were restroom fixtures working properly? Mark one only:	2/2
	Yes	
<b>IERC</b>	CHANDISING EXPERIENCE	100.0%
		19/19
	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)	3/3
	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during	/
	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)	/
1820	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)  Yes	3/3
1820	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)  Yes  Did the store overall seem to be clean and in good condition? Mark one only:	3/3
	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)  Yes  Did the store overall seem to be clean and in good condition? Mark one only:  Yes	3/3
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	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)  Yes  Did the store overall seem to be clean and in good condition? Mark one only:  Yes  Was merchandise orderly and well stocked overall (no obvious empty areas)? Mark one only:  Yes  Was merchandise that you looked at and/or purchased priced? Mark one only:  Yes  Was the location free of magazines, videos, or other materials emphasizing nudity? Mark one	3/3 4/4 3/3
	Were the transaction area and surrounding counter area neat, clean, and accessible with credit card applications visible? Mark one only: (NOTE: Credit card applications are evaluated during revealed assessments only.)  Yes  Did the store overall seem to be clean and in good condition? Mark one only:  Yes  Was merchandise orderly and well stocked overall (no obvious empty areas)? Mark one only:  Yes  Was merchandise that you looked at and/or purchased priced? Mark one only:  Yes  Was the location free of magazines, videos, or other materials emphasizing nudity? Mark one only:	3/3 4/4 3/3





Was the location free of handwritten signs (excluding starbursts)? Mark one only: 29 Yes 100.0% **CASHIER EXPERIENCE** 8/8 Did your cashier give you a friendly verbal greeting before or when you reached the counter and 3/3 30.1 provide helpful and professional service? Mark one only:

Did your store purchase receipt have the www.gasvisit.com website address listed? Mark one only: 2/2 32

No

Yes

n/a If No, mark one only: 32a

b. Receipt did not have the www.gasvisit.com website address listed at all

Did the cashier say thank you or ask you to return? Mark one only: 3/3 34

Yes



2/2



The Woodlands

A Missouri Registered LLC Self-Managed Since 2002

Don Hansen, President 214-499-2973 Michelle Baker, Secretary 816-560-7927 Carol Kuenzel, Treasurer 816-668-6779 Rick Keller, Asst. Treasurer 816-668-7565 Jan Alexander, At Large 816-304-7608 Tom Farkas, At Large 816-786-8375 Ron Pashen, At Large 816-454-7880 The Woodlands Homes Association 100 The Woodlands Gladstone, MO 64119

Via Email: Woodlands.Hoa.Board@gmail.com

Attention: Glads

**Gladstone Planning Commission** 

c/o Austin Greer, Assistant to the City Manager

Via Email: austing@gladstone.mo.us

Subject:

The Woodlands Neighborhood Opposition to the Site Plan Revision of 6221 N. Chestnut Avenue

Chuck Cuda contacted Michelle Baker, Secretary of the Woodlands Homes Association Board, to inquire about the ability to meet with any and all Woodlands residents interested in hearing and discussing proposed site plan revision and development at 6221 N. Chestnut Avenue (also known as the former Tommy's / Tanner's) property into a convenience store / gas station. The Board agreed and a notification was sent out to all Woodlands residents conveying that Mr. Cuda would be presenting to all interested at our board meeting, on Thursday, August 16th, at 6:00.

Residents attending the August 16<sup>th</sup> meeting responded with intense and very passionate opposition to the site plan revision proposal as layed out by Mr. Cuda.

Some of the Woodlands resident concerns are: disruptions due to the proximity to residents' property in the form of but not limited to; hours of operation, potential for water pollution from leakage from underground tanks, large tanker and delivery trucks, lights, trash, noise level, increased air pollution, sewage and water run-off issues, and devaluation of property due to the proximity.

The neighborhood residents also believe the times of operation and products the gas station / convenience store would most likely sell, such as alcohol, and tobacco, as well as the increased traffic would render the neighborhood less safe. The Woodlands is known to be a quiet single access neighborhood. We believe the rezoning would bring a drop in property values to those homes directly adjacent to the property and subsequently drop the entire neighborhood valuation.

The Woodlands HOA residents respectfully request the Planning Commission **NOT** approve the Site Plan Revision for 6221 N. Chestnut Avenue.

# MEMORANDUM IN OPPOSITION TO PROPOSED SITE PLAN REVISION FOR 6221 CHESTNUT AVENUE, GLADSTONE, MISSOURI

To: Gladstone Community Development Department

Gladstone Planning Commission

Gladstone City Council

From: The Woodlands, Inc. (A Missouri Nonprofit Corporation serving as the Homeowner's Association for The Woodlands neighborhood), and Individual Residents and Property Owners of The Woodlands neighborhood as evidenced by their respective signatures below.

Date: July 18, 2019

Re: The Woodlands neighborhood opposition to the Site Plan Revision proposed by Pauch, LLC and Mr. Chuck Cuda.

Dear Mayor, Council Members, Department Personnel, and Commission Members:

The Woodlands Home Association Board of Directors and undersigned owners and residents of The Woodlands submit this Memorandum for your review as you take under consideration the Site Plan Revision Application submitted by Mr. Cuda through his Limited Liability Company, Pauch, LLC. This is the second attempt by Mr. Cuda in a matter of months to seek approval. ultimately of the Gladstone City Council, to modify the site and building located at 6221 N Chestnut Avenue, Gladstone, Missouri.

Neighborhood opposition to the modification of the existing property to create a convenience store and gas station was previously presented by members of The Woodlands community at the Gladstone Planning Commission on November 19, 2018, and again at the City Council Meeting on Monday, December 10, 2018. We find ourselves having to formally present our opposition to the proposed Site Plan Revision yet again less than ten months after the City Council denied a substantially similar request presented by the same interested parties.

We readily acknowledge that the address in question has previously been operated as a restaurant and bar, and that the Zoning in and of itself would allow for the location of a gas station. You, however, as the governing body of our City, have the authority and ability to regulate and control the commercial development within the community. This authority is acknowledged by the Applicant by his submission of an application for a Site Plan Revision to convert the commercial property into a gas station and convenience store. Absent your approval of the Site Plan Revision, the project as proposed cannot proceed.

We appreciate the hard work and dedication each one of you put into the discharge of your duties as municipal government employees and office holders. We understand that it is often a thankless job and that you frequently, as in this case, find yourselves having to make a decision that will please one side of the argument and displease the other. We ask that as you evaluate the application, you take into consideration our concerns. It is our intention to have a presence at the Planning Commission hearing and City Council Meetings in August and September when this matter is presented. We plan to expound upon our concerns at both the hearing and the City Council Meeting.

In order for you to have some background and the opportunity to review some pertinent information in advance of the hearing and meeting, we are providing an abbreviated listing of our concerns and some materials gathered by individual homeowners while doing research to educate themselves about the potential ramifications of having a gas station in their back yard.

#### **Environmental Concerns**

Please find attached several articles outlining the negative environmental impact gas stations have on the adjacent properties and residents. One of these articles, "Gas stations vent far more toxic fumes than previously thought" published in Science Daily on October 4, 2018 citing Columbia University's Mailman School of Public Health, suggests that the generally applied setback of 300 feet due to concentrations of Benzene, may not be enough. The proposed gas station location will be less than 100 feet from a residence in our neighborhood.

All the articles reference air pollution, soil pollution and groundwater contamination as likely negative environmental impacts of gas stations. We are concerned that the location of a gas station so close to several of the neighborhood homes will unnecessarily expose many of our families to increased levels of harmful and potentially cancer-causing chemicals and vapors. During a public meeting on June 24, 2019, facilitated by Mr. Cuda's attorney, Jim Bowers, the engineer for the project indicated that surface water runoff (which will contain petroleum contaminants) will be directed to a holding lagoon at the front of the property. The engineer readily acknowledged that during periods of heavy rain (similar to those we have experienced in the last 60 days), the holding lagoon will be overwhelmed and the excess runoff will likely be directed to the South and ultimately back to the east along the South edge of the Woodlands neighborhood.

We have recently seen an influx of younger families with children in our neighborhood. This has been exciting to see the potential for additional revitalization of our mature, well built and maintained neighborhood that has been a staple of the community since the 1970's. We are extremely concerned that given the environmental risks a gas station presents: approval of the Site Revision Plan would end this new influx of families with younger children.

### Noise/Light Pollution/Additional Traffic

During the community meeting on June 24, 2019, Mr. Cuda indicated that his preliminary investigation suggests that the location would be a very lucrative location for a gas station and convenience store. Shabbir Houssain, Business Coach and Author (GasStationBusiness101.com) indicates that there is a wide range of revenue for what he refers to as "average sized" gas stations (less than 7 fuel dispensers). It is our understanding that Mr. Cuda's project will have ten (10) dispensers. Mr. Houssain indicates that fuel sales range from 40,000 to 150,000 gallons per month. Mr. Cuda's engineer confirmed during the public meeting on June 24, 2019 that they anticipated 10,000-gallon deliveries every three to five days indicating Mr. Cuda is projecting gas sales of 60,000 to 100,000 gallons per month. Assuming an average fill-up of 10 gallons, these numbers suggest there could be between 6,000 and 10,000 vehicles visiting the location per month. These figures do not take into consideration the additional vehicles frequenting the convenience store without making a gas purchase. This would be an exponentially larger level of traffic at the edge of our neighborhood than any business that has operated at this location in the past.

Vehicles at gas stations frequently are left running in hot and cold weather and the increased volume of people spending short periods of time at the location will drastically increase the noise level for property owners on the western edge of the Woodlands neighborhood. The Site Plan design proposes the planting of several deciduous trees. While this may be an effective tool to minimize noise pollution into the neighborhood ten to fifteen years from now when the trees are mature, they will do little to abate the noise nuisance in the interim.

The proposed hours of operation are from 5:00 a.m. to 2:00 a.m. The building on this property is located a mere 35 feet from the lot line of the house adjacent to the property. No prior business had full lighting during all hours except a three-hour window between 2 a.m. and 5 a.m.

In the event the Site Plan Revision is approved, how does the Planning Commission propose to address the dramatic increase in traffic exiting and entering Antioch road in this area. We are concerned that without substantial modifications to the crosswalks and traffic control devices, there will be an unnecessary increased risk to pedestrians and bicycle riders in the neighborhood.

#### **Economic Impact on Current Businesses**

One of our neighborhood residents noted the fact that there are currently five gas stations within a three (3) mile radius of The Woodlands community. During the public meeting on June 24, 2019, Mr. Cuda expressed the sentiment that the Conoco at Antioch/Kendallwood Parkway has such a small footprint it is not a viable competitor. All the presenters further intimated that the proposed location would seek to set itself out from its competitors by offering a large convenience store area with take-out food and a variety of hot food snacks. These comments suggest they intend to actively compete for business from current establishments, some of which are already showing signs of a lack of profitability leading to closure of existing businesses. Of further concern is the impact a convenience store would have on the CVS location at the intersection of Antioch and Brooktree Lane.

# Unintended Consequences of Recommended Conditions of the Community Development Department

The Recommended Conditions of the Community Development Department include installation of a 6-foot-tall PVC privacy fence and the requirement that the developer maintain the growth between the privacy fence and the residential privacy fence. At the public meeting on June 24, 2019, it was disclosed that there would be a ten (10) foot gap between the two fences that would not be illuminated in order to facilitate maintenance of the area between the fences. It is our concern that this would create an attractive nuisance in the form of an attractive location for vagrants to sleep or for individuals to engage in unlawful activities outside of the visibility of the public.

#### Conclusion

We have outlined only a few of our most significant concerns about the proposed Site Plan Revision of 6221 N Chestnut Avenue, Gladstone, Missouri. We appreciate your consideration of our concerns as you evaluate the application submitted by Pauch, LLC and Mr. Chuck Cuda.

Sincerely,

The Woodlands, Inc.

Don Hansen, President

Dom Hannen

The Woodlands Homeowners and Residents Signatures are contained on the following pages.

	Name	Home/Unit #	Name	Home/Unit#
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	16,197	145	Lacely Co	udern 92
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# Pollution from Gas Stations



Updated April 25, 2017 By Brett Smith

Both air pollution and soil pollution are associated with gas filling stations. While air pollution is created by volatile chemicals vaporizing during the gas filling process, soil pollution can be caused by underground pipes or tanks rusting or leaking -- slowly releasing contaminants into surrounding area. The constant spilling of gasoline can also cause significant pollution.

## **Toxic Fumes**

When gasoline evaporates, it gives off toxic fumes; a 2011 study found that the air surrounding gas stations can contain much higher concentrations of these cancercausing vapors than average. Conducted by the Energy and Resources Institute (TERI) in India, the study examined air quality at 40 gas stations in Delhi. The researchers pointed out that this pollution should be particularly concerning for station attendants, who may spend long hours at a station every day.

# Soil Pollution

Soil surrounding a gas station can become contaminated with gasoline. Gasoline in the soil can be dangerous, as it contains the toxic chemical benzene, which can leach into the water supply. In August 2012, soil near a former Exxon gas station in Wilmington, North Carolina, was found to be contaminated. In October 2011, gasoline was detected in the soil near a Citgo gas station in Shorewood, Wisconsin.

# Guarding Against Fumes and Leaks

Toxic fumes emanating from gas stations can be mitigated by a vapor recovery system. The system is installed at the underground tank's filling point, and uses carbon to absorb any vapors being released. The EPA has outlined systems that could be used to detect any leaks from an underground tank, such as a secondary containment with interstitial monitoring, automatic tank gauging systems and groundwater monitoring. As a temporary system, the EPA recommends combining tank tightness testing with inventory control -- or with manual tank gauging, for smaller tanks.

## **Lead Contamination**

Phased out by the dawn of the 21st century, leaded gasoline used to be a conventional automobile fuel around the world. As a result, some soils near old or long-standing gas stations could be contaminated with lead. The biggest risk of exposure is through eating or swallowing lead-contaminated soil. Young children are at the greatest risk for this type of exposure, as they often play in dirt and then put their hands and other objects into their mouths. When children are repeatedly exposed to small amounts of lead this way, the metal can build up in their bodies and cause damage.

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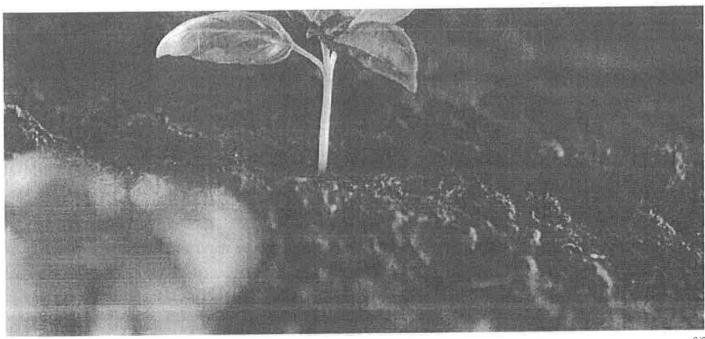
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# Soil Pollution Remedies





### Updated April 24, 2017 By Carolyn Csanyi

Often you can't tell if soil is polluted by looking at it. Sometimes the presence of oil, waste or litter will indicate unwanted substances, but generally it takes soil tests to reveal pollutants. Cases exist where homes or schools get built over leaking solid waste sites, or in areas contaminated by mining or industrial operations, and later prove hazardous to inhabitants. Once contaminants enter the soil, cleaning them up can be difficult and expensive.

## **Treatment Considerations**

Each case of soil pollution needs careful consideration to decide on the most successful clean-up strategy. Variables include the type of contaminant, extent of pollution, soil type, soil condition, soil location, and weather, according to the U.S. Department of Agriculture. The treatment chosen out of the many available depends on what preliminary testing and evaluation reveal. Treatment occurs at the site of contamination, or soil is dug up and treated elsewhere. Treatment cost is also important, with some solutions costly, lengthy or labor-intensive.

# Physical and Chemical Treatments

The U.S. Environmental Protection Agency (EPA) explains the many soil remediation techniques. Vapor extraction can be used to treat soil contaminated with volatile compounds on or off site. In either case, with vapor extraction, air is passed through the soil using a vacuum. This frees the volatile contaminates from their attraction to the soil. The freed volatiles are vented out. Solidification and stabilization (S/S) are on-site techniques used to treat radioactive, hazardous and mixed wastes. With solidification, waste in soil is physically trapped in place by containing it to form a solid. Stabilization immobilizes contaminants using chemical means, rather than physical. Commonly used inorganic stabilization agents include carbon and sulfur-based binders.

Another technique, soil flushing, literally involves flushing a contaminated area with water or an appropriate liquid solution. After flushing, the fluid carrying the

contaminants is collected and disposed of or treated. Positively charged contaminants, like heavy metals, can be removed using electrokinetic separation, which involves passing an electric current between two electrodes buried in contaminated soil. In off-site treatment, sometimes soil contaminated with petroleum is excavated and put into paving material.

# **Biological Treatments**

Some soil microorganisms such as bacteria can metabolize and actually thrive on pollutants; these microbes convert pollutants to less mobile or less hazardous forms. Called bioremediation, this treats contamination from oil or petroleum products, pesticides and solvents. Microbes need good growth conditions, however. Often, substances that encourage microbe growth, such as molasses and vegetable oil or oxygen may be added to the soil, according to the EPA.

In phytoremediation, plants that actively take up heavy metals, such as arsenic and lead, are planted in contaminated soil. The soil is cleaned as metals are taken up and become concentrated in their foliage. This is a relatively slow process, however, that may take multiple years. Also, the plants themselves become contaminated as they take up the metals and can pose a hazard to humans and wildlife that consume them. The EPA warns that care must be taken to properly segregate the plants.

## **Thermal Treatments**

Different techniques of applying heat to soils help remove volatile contaminants. Treatments include steam injection and extraction, radio-frequency heating, conductive heating and electrical resistance heating, according to the EPA. A more extreme example of heat treatment is vitrification, where high temperatures turn soil to glass, capturing nonvolatile contaminants such as heavy metals and radioactive materials. Treatments for excavated soil that use heat include incineration and thermal desorption. Incineration heats soil at temperatures between 870 and 1,200 degrees Celsius (1,600 to 2,200 F) to volatilize organic contaminants, which are then run through an air collection system for oxidative breakdown. Thermal desorption volatilizes pollutants, which are then removed by a gas treatment system.

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## **Gas Station**

### What are they?

Gas stations provide motor vehicles with diesel fuel, gasoline, and oil. Fuel is stored and transferred between tanker trucks, storage tanks, and vehicle tanks.

See also: Benzene Methane Propane Gasoline Volatile Organic Compounds (VOCs) Toluene Ozone

## Why are they a concern?

Gas stations can pose significant hazards to people. As people fill up their gas tanks, diesel fuel or gasoline may drip from the nozzle onto the ground, and vapors may leak from the open gas tank into the air. This can lead to <u>air pollution</u> and soil pollution.

Air pollution is created when fuel evaporates, emitting toxic fumes, and when motor vehicles are running. Soil pollution can result when fuel that spills to the ground builds up and seeps into underlying soil and groundwater. This can contaminate local well water. Underground pipes or tanks that rust or leak can also release contaminants into surrounding areas.

Gasoline is highly flammable (easily set on fire).

People also risk exposure to toxic chemicals if a gas station has an auto repair or paint shop.

### Who is at risk?

- People filling vehicle tanks at a gas station are at risk for exposure to diesel fuel or gasoline—either by breathing its vapors or by spilling
  it directly onto their skin.
- People who live or work near a gas station may be exposed to toxic chemicals in the air, soil, and drinking water.
- Children, the elderly, and people of all ages who have lung conditions such as asthma are at higher risk for harm.

## What pollutants are of greatest concern?

- Gasoline contains harmful chemicals, including benzene, which causes cancer.
- Gasoline vapors contain volatile organic compounds, which harm human health and contribute to ozone pollution.
- Running motor vehicles produce carbon monoxide and particulate matter.
- Fuel leaking from underground storage tanks can contaminate groundwater.
- Mechanics working in auto repair or paint shops at gas stations use solvents, antifreeze, and lead products. They may work on vehicles
  that have asbestos in brakes or clutches.

### Reduce your risk

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# Gas Stations Pollution

Gas stations are found everywhere. They are so common and necessary that they became an integral part of our daily lives. Thus, it is no wonder that they are not usually associated with environmental and health risks, and even less with home pollution (/residential/). For example, have you asked yourself: "Is my home or the house I intend to buy close to a gas station?" Is the proximity to a gas station an excluding criterion for house shopping? Well, it may be! The following paragraphs should help you decide by yourself.

Below are presented, briefly, the main and sometimes severe pollution problems associated with gas stations along with the subsequent health, environmental, and home pollution risks. Additionally, due to the importance and practical relevance, prevention and cost recovery issues are first discussed.

## Prevention and Cost Recovery

• **Personal damage**. From the perspective of the public, the best prevention is to spend as little time as possible at a gas station and avoid living close to a gas

- station (e.g., 1 block or less). However, if this is not possible or if the exposure has already occurred (e.g., you live within 1 block from a gas station or are employed at a convenience store) you may be entitled to compensation.
- Property damage. From the perspective of gas station owners and/or operators, usually the insurance company may pay for pollution damage.
   However, not all pollution cases are straightforward and the insurance may try to avoid paying whenever possible. Gas station pollution liability is complex and legal advice is recommended.

### Gas Station Pollution Release

Pollution released at gas stations is mainly due to the following:

- Accidental leaks and spills
- · Gas station pollution violations
- Gas station normal operation

### Gas Station Contaminants

The usual contaminants released into the environment (/chemical/) from gas stations are represented by the stored and sold petroleum products such as gasoline and diesel fuel. These are complex mixtures of volatile organic compounds (mainly hydrocarbons) and a series of additives which are blended with petroleum distillates to improve the quality of the final products and their usability. While there are hundreds of individual compounds associated with gasoline and diesel fuel (many of which are not even identified), the main compounds raising pollution problems associated with gas stations are the following:

- Benzene
- Toluene
- Ethylbenzene
- Xylenes
- Pb
- MTBE

- Ethylene dichloride (EDC)
- Naphthalene

### Overview

- On the positive side currently, better equipment and improved operation
  practices along with improved awareness of various pollution risks allow a
  more optimistic view of gas stations as integral part of urban environments
  with fewer pollution risks. Additionally, gas station pollution penalties and
  fines exist and are evolving, ensuring overall considerably fewer spills.
- On the negative side almost a century of operation (of some stations) left a legacy of petroleum pollution (of soil and groundwater) that is found through current time and may extend to a few blocks away from the station.

  Additionally, the current economic difficulties seem to affect the implementation enforcement of some environmental-safe measures at gas stations, and consequently, gas stations are repeatedly cited for air pollution (/air/). There are now close to 170,000 fuel retailers (gas stations) at this moment in the U.S. alone. According to USEIA, 143.37 billion gallons were pumped in the U.S. in 2016, the largest gasoline consumption ever.

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## Gas stations vent far more toxic fumes than previously thought

Date:

October 4, 2018

Source:

Columbia University's Mailman School of Public Health

Summary:

A study examined the release of vapors from gas station vent pipes, finding emissions were 10 times higher than estimates used in setback regulations used to determine how

close schools, playgrounds, and parks can be situated to the facilities.

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**FULL STORY** 

A study led by environmental health scientists at Columbia University Mailman School of Public Health examined the release of vapors from gas station vent pipes, finding emissions were 10 times higher than estimates used in setback regulations used to determine how close schools, playgrounds, and parks can be situated to the facilities. Findings appear in the journal Science of the Total Environment.

Gasoline vapors contain a number of toxic chemicals, notably benzene, a carcinogen.

The researchers attached gas flow meters to venting pipes at two large gas stations in the Midwest and Northwest and took measurements over a three-week period. They report average daily evaporative losses of 7 and 3 gallons of liquid gasoline, respectively, or 1.4 pounds and 1.7 pounds per 1,000 gallons dispensed at the pump. By comparison, the California Air Pollution Control Officers Association (CAPCOA) used an estimate of 0.11 pounds per 1,000 gallons. Based on CAPCOA emission estimates, the California Air Resources Board (CARB) determined their setback regulation of 300 feet (91 meters) from large gas stations. Similar laws exist in many, but not all states and localities. In urban areas like New York City, some gas stations are located directly adjacent to apartment buildings.

The study also simulated how the fuel vapor was carried in the air to assess the potential for short- and medium-term benzene exposures, comparing their measurements to three established thresholds. The California Office of Environmental Health Hazard Assessment one-hour Reference Exposure Level (REL) for benzene -- defined as a continuous hour of exposure to the chemical -- was exceeded at both gas stations at distances greater than 50 meters. At the Midwest gas station, REL was exceeded on two different days at distances greater than 50 meters, and once as far as 160 meters. The Agency for Toxic Substances and Disease Registry's Minimal Risk Level (MRL) for benzene exposure over a period between two weeks and a year was exceeded within 7 or 8 meters of the two gas stations. A less stringent measure used for short-term exposures of first responders, the American Industrial Hygiene Association's Emergency Response Planning Guidelines (ERPG), was not exceeded.

"We found evidence that much more benzene is released by gas stations than previously thought. In addition, even during a relatively short study period, we saw a number of instances in which people could be exposed to the chemical at locations beyond the setback distance of 300 feet," said first author Markus Hilpert, PhD, associate professor of Environmental Health Sciences at the Columbia Mailman School. "Officials should reconsider their regulations based on these data with particular attention to the possibility of short spikes in emissions resulting from regular operations or improper procedures related to fuel deliveries and the use of pollution prevention technology."

In previous work, Hilpert and colleagues documented the release of gasoline as fuel is stored and transferred between tanker trucks, storage tanks, and vehicle tanks, and how these spills can contaminate the surrounding environment. Next, the researchers will explore additional short-term measures of vapor spread to determine the bounds of safe setbacks.

Co-authors of the new study include Ana Maria Rule at Johns Hopkins, Bernat Adria-Mora formerly at Columbia, and Tedmund Tiberi at ARID Technologies, Inc. In a competing interest statement, the authors note that Tiberi directs a company that develops technologies for reducing fuel emissions from gasoline-handling operations. The research is supported by a grant from the National Institutes of Health (ES009089).

#### Story Source:

Materials provided by Columbia University's Mailman School of Public Health. Note: Content may be edited for style and length.

#### Journal Reference:

1. Markus Hilpert, Ana Maria Rule, Bernat Adria-Mora, Tedmund Tiberi. Vent pipe emissions from storage tanks at gas stations: Implications for setback distances. Science of The Total Environment, 2019; 650: 2239 DOI: 10.1016/j.scitotenv.2018.09.303

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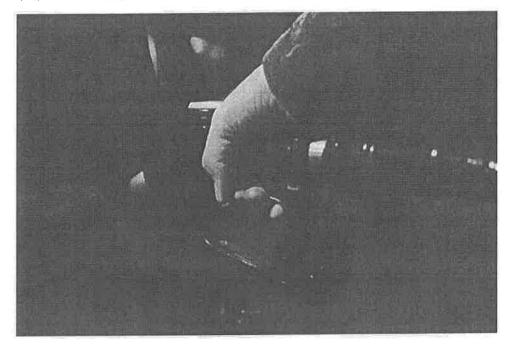
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# What are the effects of environmental pollution from gas stations?

By Raymond Quan - March 7 2019



Researchers in the United States investigated the effects of environmental pollution at gas stations by examining the emissions of cancerous substances such as benzene from station vent pipes.

Many people are aware that gasoline vapours are emitted from gas stations. But while they may be aware of common modes such as leaks and spills, they may not be aware of another source of emissions: vent pipes.

All gas stations have vent pipes attached to their underground gasoline storage tanks because gasoline vapours in these tanks can expand or contract due to changes in the outside temperature or barometric pressure, or because pressure can build up in the tanks due to evaporation.

Thus, vent pipes are needed to vent these excess gases out, and they are very much the largest emissions sources at gas stations. But what are the health effects of environmental pollution from these emissions?

# Studying hourly vent pipe emissions and relating it to benzene exposure

With this issue in mind, researchers in the United States studied gasoline vent pipe emissions from gas stations. To the best of their knowledge, their study was the first to study hourly vent pipe emission data and publish it in a peer-reviewed journal. They believe it is also the first study to use this hourly data to model the resulting benzene (a carcinogen) emissions from gas stations. Their research was published in *Science of the Total Environment*.

The researchers studied two high-volume gas stations, with sales of 3.6 million gal of gasoline per year:

- One was in located in the U.S. Northwest coast, and the research was done in October 2009. This station was a daytime operation (6:00 am-9:30 pm on weekdays and 7 am-7 pm on weekends) with sales of roughly 700,000 gal (2.6 million L) per month.
- The other was in the U.S. Midwest, and the research was done in the period December 2014-January 2015. This station was a 24-hour operation with sales of 450,000 gal (1.7million L) per month.

The original reason for the research was to do a cost-benefit analysis to compare the cost of lost fuel to the benefit of purchasing technologies to reduce these losses.

A dry gas diaphragm flow meter was used to measure the emissions through the stations' vent pipes. To determine the benzene emissions coming out of the vent pipes, the researchers did not actually measure for benzene, but predicted benzene concentrations using the AERMOD Modeling System developed by the US Environmental Protection Agency (EPA).

# Benzene emissions can exceed one-hour thresholds

The emissions data from the two stations showed no constant pattern. At the Midwest 24-hour station, emissions were generally higher during the daytime and evening hours, where one assumes that more gasoline was being dispensed. In contrast, at the Northwest daytime-evening station, emissions were actually higher when the station was closed, at late night and early morning. Possible explanations for this discrepancy include improperly performed fuel drops, or hardware problems with piping and/or valves.

The benzene emissions predicted by the model showed that these emissions would at times exceed the 1-hour Reference Exposure Level (REL) for this carcinogen, even at a distance of as far as 160 m from the station. As well, recorded vent emission factors were more than 10 times higher than the current estimates used to determine setback distances (e.g. minimum distances away from other buildings) for gas stations.

Limitations noted by the authors included the following:

- 1. Data were only collected in fall and winter. This limitation matters because vent pipe emissions are seasonally-dependent.
- 2. Benzene levels were not directly measured.
- 3. The study did not predict indoor benzene levels.

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Spilled or vaporized gasoline is not the only chemical hazard if the station is also a repair shop. Mechanics use solvents, antifreeze and lead products, and may work on vehicles that have asbestos in brakes or clutches. Auto refinishers and paint shops use even more potentially harmful chemicals.

In today's car-centric world, we can't escape exposure completely, because these chemicals are in our air just about everywhere. But by choosing where we live, keeping an eye out for spills, and pressuring the oil companies to do the right thing for the communities they occupy, we can minimize our exposures.

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Gladstone Planning Commission and Gladstone City Council.

Re: Site Plan Revision of formally Tanner restaurant.

As a home owner in the cul-de-sac backing up to property in question I am very opposed to having another convenient store with lots of cars coming and going all hours of the night. Not only the noise is a nuisance but all the fumes are a hazard to our health. The gas station up the street is adding on to make a large convenient store and up the street is Quick trip and I think that is definitely enough.

My late husband Terry, Liggett Construction, built 4 houses in the cul-de sac that I live in. Liggett has developed many subdivisions in Gladstone, Heiden Estate, Christopher Heights, Meadowland townhomes but The Woodlands was where we wanted to build our forever home and did so in 1991.

I hope you take this in consideration when voting for something that most of us in The Woodlands are opposed to.

Maj-Britt Liggett

130 The Woodlands



OPES Commercial Real Estate 6051 N. Chestnut Ave, Ste B Gladstone, MO 64119 Office: (816) 268-4493

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November 27, 2018

City Planning Commission City of Gladstone 7010 N. Holmes Street Gladstone, MO 64118

Re: City Planning Commission Hearing November 19, 2018

Dear City Planning Commission,

I first want to thank you and the City Staff for all your time and effort to assist us with the possible redevelopment of 6221 Chestnut Ave. I felt that by hosting the neighborhood meeting and appearing a lot of their initial concerns, as well as having multiple meetings with staff that we would be able to reassure staff, council, and community concerns. I will not be present at the December 3<sup>rd</sup> meeting as I have a prior engagement, but I would like to pen this letter to respectfully refute several the neighbors' issues that were heard by planning commission:

1. Noise Level: This property is zoned for a bar and restaurant and has been with past uses for which have operated with a 1:00 tavern license in the past. Workers, bartenders, wait staff, etc. possibly remaining on site up to 3:00 am. Furthermore, there is a McDonald's with hours from 4 AM to 12 AM and weekends 24 Hours with an intercom drive-thru system 300 ft from the nearest property owners back door; that same property owner's back door is 273 ft from the nearest Mechanical Pump Dispenser ("MPD") as shown on attached "Exhibit A." McDonald's employees park right up against this property owner's backyard and they have zero trees or screening as we offer in our development. Furthermore, there is an easement that will allow those cars at McDonald's to drive in, out, and around the Subject Property. We are not creating noise that has not been on this site prior to our proposed use, there used to be Karaoke on weekends and bands outside at this same building, these neighbors were either unaware because they did not patron the bar and grill or they did not hear the noise. Furthermore, we are planting sod that will prohibit any vehicle from driving around our building and adjacent to the neighboring property owner's property.

around our building and adjacent to the neighboring property owner's property.

Lighting: By providing screening with trees and directional lighting, per the City's code and conditions we do not articipate this being an issue

conditions, we do not anticipate this being an issue.

Truck Traffic: Many people voiced concerns about tanker trucks tearing up streets and not being able to make adequate turns, frequenting the site, etc. I want planning commission to understand that even if this is a good site and it does 120,000 gallons of gas a month, there is a 20,000-gallon underground storage tank which would mean that the tank would need to be filled 12-15 times a month on the high end, bringing a 42 ft tanker on to the site. In retrospect, my Dad operates a 1,800-SF restaurant and he receives deliveries from C&C Produce, Reinhart, US Foods, Excel Linen, and Perez twice a week. That would mean that a restaurant ¼ the size of this one would have a 53 ft truck on site 8 times a week, or over 35 times a month; this doesn't include liquor deliveries and beer deliveries, which also come from tractor trailers. Furthermore, Chestnut is a feeder street, not a main arterial. It is a City street built to handle this type of traffic. In retrospect, a fire truck is the same width and 35 ft long, and Gladstone Public Safety stated in their report that there were no traffic impacts, comparable/relative to the historical land use of the property.

Air Pollution: This is purely speculative, I have searched and searched and found no studies

4. Air Pollution: This is purely speculative, I have searched and searched and found no studies related to health consequences of nearby residents of gas stations from any omissions or vapors. What I am able to quantify is that there was a Quik Trip with the closest MPD being 465 ft from the closest neighborhoods back door compared to 273 ft to the closest MPD for that same neighbor. Quik Trip was running volume of close to 200,000 gallons a month and therefore had greater tanker traffic, greater consumer traffic, and greater fueling omissions and would thus have created a greater impact to air quality. Just to give you an idea of how close these MPDs are to where QTs MPDs

were, it's 520 ft as the crow flies and all of these measurements are shown on attached "Exhibit B."
5. Economic Impact: Again, this is purely speculative. In my 14 years in this industry, we have seen that a development which is safe, secure, and provides a neighborhood service is a value to the community and surrounding properties. Within 3 miles from the subject site, I am redeveloping a 100,000-SF former Woodbine Nursing Home into a 114-unit continuum of care facility. My office is at 6221 Chestnut and is visible from the subject site. These projects are all adding in growth for the community very close to the subject property. In the last few years, we have redeveloped Country Club Shops and Foxwood Shops right off Vivion Rd with surrounding residential. We have redeveloped Quality Plaza Shopping Center, and 310 Englewood just to name a couple of projects in Gladstone, these are quality projects that add value to the community.
6. Crime: I do not know that there have been studies that show gas stations/convenience stores are

Crime: I do not know that there have been studies that show gas stations/convenience stores are more susceptible to crime than vacant buildings. I have seen in the past that vacant buildings tend to attract thieves, vandalism, and there is a correlation of empty buildings and criminal activity.

7. General Traffic: This is not a situation where people are congregating 50-100 vehicles at a time. The Public Safety Review in the staff report indicated that there was no traffic impact and that traffic is comparable/relative to the historical land use of the property. With the property being on a feeder street off the main arterials it allows for better ease of traffic to get back on to the arterials by heading north out of the site or south to hit the light at Shady Lane and Antioch. In addition, no one will be driving through the Woodlands to access the site, the entrance to the Woodlands is east of our site off Brooktree Lane and over .3 miles from the nearest entrance to our site as shown on "Exhibit C."

8. Screening: One of the key issues and questions from the Planning Commission was regarding the fence and screening. I think the best thing to do would be to curb my property line and construct a new 6' privacy fence on our property line so that it is clear who is maintaining it and who owns it. I will have my lawn and landscape company weed eat under the fence when they do our grass to eliminate any possibility for growth between the fences. Regarding the screening of the building and the HVAC units, I will assure the Planning Commission that I will elevate my new parapet wall to provide screening from Antioch Rd looking at the building. To provide any additional screening from the neighborhood to the east or bank to the south, I am open to planting additional trees; i.e. evergreens or spruce trees, so we don't have the issue of leaves falling in the winter to allow the property to be visible. I think the blue spruce/evergreens will provide adequate screening from the entire building for them, not just the RTU's. It would also provide a 365 day a year sound barrier to further appease any noise concerns that they may have.

9. Alternative Uses: Many people from the neighborhood want to see alternative uses than our proposed use on this site. The reality is, I had this building listed for over seven months prior to getting any interest and the only interest is for the proposed use. We have had it under contract for another five months while working on our project and have had no further interest since lowering our price. The 6,700-SF restaurant is obsolete. There is no one that can cover the staffing and overhead for such an operation with grub hub, uber eats, and other delivery services a more convenient time-effective option. We have presented the site to other possible users as a potential scrape and ground up development opportunity, but they have been quick to turn it down due to the lack of visibility heading south. There are further issues with the access easement that runs through the property which was purchased by McDonald's when they completed their remodel. It is unfair to The Cascone's, who operated in this community for a number of years as Tommy's, for the later part of the tenure more as a community service rather than a profitability stance to expect them as owners to continue to go down the same path that has continuously produced failed ventures.

I ask that the Planning Commission consider our proposed project and hope that it is evident that we are willing to work with City staff as evidenced by accepting all the recommended conditions in the staff report.

I can look out of my office window and see this project, just like I can look out of my office and see the 2900 Kendallwood project that I am working on. I am a local developer with local ties, I was born and raised in Brook Hill and I am still a northlander. We have done a number of redevelopments in the northland that I am proud to have stamped my name on and this will be no different; I want to provide quality services to the community where they are lacking and there is a demand for our proposed use with the recent vacating of Quik Trip 6309 NE Antioch Rd 520' from our proposed site.

Sincerely,

Charles V. Cuda

Che Val

Gladstone City Council Gladstone City Hall 7010 N Holmes Street Gladstone, MO 64118

> Proposed Site Plan Revision to Redevelop the Vacant Restaurant/Bar Re: into a Gas Station and Convenience Store by Pauch, LLC

Dear Mayor Suter, Mayor Pro Tem Moore and Councilmen:

I am writing in connection to the above application as the President of larry Real Estate located in the neighborhood of 6221 N. Chestnut Avenue. I am familiar with the redevelopment plans and know the site well. On behalf of Curry feel 614 wish to offer our support to this planned infill redevelopment because we believe it will be a positive and much needed improvement for the neighborhood.

We are pleased by the opportunity to see this long-vacant neighboring property be brought back to life. This planned infill redevelopment will meet the need of our community through improving the appearance of North Antioch Road by revitalizing underutilized land. Approval of this project will help to restore vitality to this area by enhancing the established but underperforming commercial district with a redevelopment that is compatible with the surrounding uses and character of the community.

We encourage the City Council to approve the site plan revision for this property as this planned infill redevelopment supports revitalization and positive growth in the corridor.

Sincerely,

Ellen M Todd Name President

LINE (ER

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# Science of the Total Environment





# Vent pipe emissions from storage tanks at gas stations: Implications for setback distances

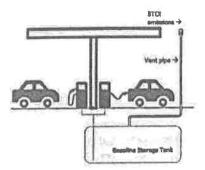
Markus Hilpert <sup>a,\*</sup>, Ana Maria Rule <sup>b</sup>, Bernat Adria-Mora <sup>a</sup>, Tedmund Tiberi <sup>c</sup>

- \* Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY 10032, United States of America
- Department of Environmental Health and Engineering, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 2120S, United States of America
- ARID Technologies, Inc., Wheatan, IL 60187, United States of America

#### HIGHLIGHTS

- At gas stations, fuel vapors are released from storage tanks through vent pipes.
- We measured vent pipe flow rates and tank pressure at high temporal resolution.
- Vent emission factors were >10 times
   higher than previous estimates
- Modeling was used to examine exceedance of benzene short-term exposure fimits.

#### GRAPHICAL ABSTRACT



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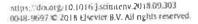
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## ABSTRACT

At gas stations, fuel vapors are released into the atmosphere from storage tanks through vent pipes. Little is 7 known about when releases occur, their magnitude, and their potential health consequences. Our goals were to quantify vent pipe releases and examine exceedance of short-term exposure limits to benzene around gas stations. At two US gas stations, we measured volumetric vent pipe flow rates and pressure in the storage tank head-space at high temporal resolution for approximately three weeks. Based on the measured vent emission and meteorological data, we performed air dispersion modeling to obtain hourly atmospheric benzene levels. For the two gas stations, average vent emission factors were 0.17 and 0.21 kg of gasoline per 1000 L dispensed. Modeling suggests that at one gas station, a 1-hour Reference Exposure Level (REL) for benzene for the general population (8 ppb) was exceeded only closer than 50 m from the station's center. At the other gas station, the REL was exceeded on two different days and up to 160 m from the center, likely due to non-compliant bulk fuel deliveries. A minimum risk level for intermediate duration (>14-364 days) benzene exposure (6 ppb) was exceeded at the elevation of the vent pipe opening up to 7 and 8 m from the two gas stations. Recorded vent emission factors were >10 times higher than estimates used to derive secback distances for gas stations. Setback distances should be revisited to address temporal variability and pollution controls in vent emissions.

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E-mail address: mh3632@columbia.edu (M. Hilpert).





Corresponding author at: Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, 722 West 168th St., New York, NY 10032, United States of America.

# 1. latroduction

in the US, approximately 143 billion gal (54) billion Li of gasoline were dispensed in 2016 at gas stations (FIA, 2017) resulting in release of unburned fuel to the environment in the form of vapor or liquid (Mildpert et al., 2013). This is a public health concern, as unburned fuel chemicals such as henzene, toluene, ethyl benzene, and xylones BTEX) are harmful to humans (ATSDR, 2004). Benzene is of special concern because it is causally associated with different types of cancer (fARC 2012) Track drivers delivering gasoline and workers dispensing fuel have among the highest exposures to fuel referres (IARC 2012). However, people living near or working in retail at gas stations, and childoes in actions and on playgrounds can also be exposed, with distance to the gas stations significantly affecting exposure levels (Terres et al., 3740; Je & Ob. 2001; Ju & Moon, 1999; Hanzagen et al., 2018). A metaanalysis Lufante, 2017; of three case-control studies (Sieflen et al., 2004: Brossein et al., 2006; Harrison et al., 1960) saggests that childhood leakemia is associated with residential proximity to gas stoffons,

Sources of anhument fuel releases at gas stations include leaks from storage tracks, accidental spills from the notifies of gas dispensers (3) here 8. Breyese, 2014; Acco Mora 8. Hilpert, 2017; Morgoster et al., 1092), highieve vapor entissions through leaky pipes and ritings, schick track vapor releases when refoeling, and leaky hoses, all of which can contribute to subsurface and air pollution (Hilpert et al., 2015). Routine held releases also occur through year pipes of fuel storage tanks but are less moticeable because the pipes are typically fail, e.g., 4 m. These vent pipes are put in place to equilibrate pressures in the tanks and can be located as close as a few meters from residential buildings in dense urban antings (Fig. 1).

Lisbarried fuel can be released from storage tanks into the environment through "working" and "breathing" losses (Yerushalasi & Rastan, 2014). A working loss occurs when liquid is pumped into or unit of a tank for a storage tank, this can nappeo when it is refilled from a tanker truck or when him is dispensed to refuel vehicles. [Sortistics Canada, 2009] if the pressure in the storage tank exceeds the relief pressure of the pressure/vactorin (P/V) valve (194, 2008). P/V valve threshold pressures are typically set to around 4-3 and --8 in, of water column, two (7-5 and --20 nPa). However, PrV valves are not always used, particularly in cold charactes, as valves may fall under cold weather conditions (Statistics Canada, 2009).

Breathing losses occur when no squid is pumped into or out of a tank because of vapor expansion and contraction due to temperature and barometric pressure changes or because pressure in the storage

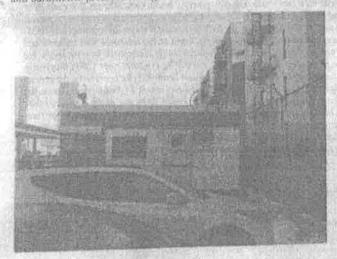


Fig. 1. The three went pipes (enclased by the red ellipse) on the right side of the convenience time of a gas station are +10 m away from the residential building (low operations) to references to race in this house legend, the reader is referred to the rest vectors of this article.)

tank may increase when fuel in the tank evaporates (Yensshalmi & Rastan, 2014; EPA, 2008). Although delayed or redirected by the P/V valve, breathing emissions can be significant and represent an environmental and health concern (Yerushalmi & Rastan, 2014).

Stage I vapor recovery systems, put in place to prevent working losses while delivering fael to a station, collect the vapors displaced while loading a storage tank, redirecting them into the delivery (rack, Stage II vapor recovery systems minimize working losses while delivering gas from the storage tank to the customer's car. During Stage II vapor recovery, gasoline vapors can be released through the vent pipe, if the sum of the flow rates of the returned volume and of the fuel evaporating within the storage tank is greater than the volume of figuring gasoline dispensed (Statistics Canada, 1009), We refer to this scenario as pressure while dispensing (PWD), in theory, a properly designed Stage II vapor recovery system should not have working losses, although in practice this is not typically the case (McEntire, 2000).

Regulations on setback distances for gas stations are based on lifetime cancer risk estimates. Several studies have assessed bearene cancer risk near gas stations (Atabi & Mirzamosseuri, 2013; Correa et al., 2017; Cruz et al., 2007; Edokpolo et al., 2015; Edokpolo et al., 2014; Karakitsios et al., 2007). Based on cancer risk estimations, the California Air Resources Board (CARB) recommended (hat schools, day coras and other rensitive land uses should not be located within 300 ft. (91 m) of a large gas station (denned as a facility with an annual sales volume of 16 million gal = 13.6 million L or greater) (Catera, CARB, 2005). This CARB recommendation has not been adopted by all US states, and within states setback distances can depend on local government. Notably, CARB regulations do not account for short term exposure limits and health effects. An important limitation of existing regulations is the oss of average gasoline emission rates estimated in the 90s that do not consider executions (CAPCOA, 1997).

The main objective of this study is to evaluate fuel vapor releases through went pipes of storage tanks at gas stations based on went emission measurements conducted at two gas stations in the U5 in 2009 and 2015, including the characterization of excursions at a high temporal resolution (--minutes) and mereorological conditions at an hourly temporal resolution. In addition, we performed hourly simulations of atmospheric transport of emitted fuel vapors to inform regulations on serback distances between gas stations and adjacent sensitive land uses by comparing modeled benzene concentrations to four 60-min benzene exposure limits: an acute Reference Exposure Level (REL) for infrequent (once per month or less) exposure (WHO, 2010) and Emergency Response Planning Guidelines ERPG-1, ERPG-2 and ERPG-3 (AIHA, 2016). Finally we compared simulated benzene levels to a Minimal Risk Level (MRL) for benzene for intermediate exposure duration (14 to 364 days) (A ISDR, 2018) because that duration window includes our duration of data collection. See Table 1 for the various benzene exposure limits and issuing agencies.

#### 2. Methods

Although we provide SI unit conversions, we report some measures in English engineering units (ft, gal, and lb) as regulatory agencies such as CARB use these units.

### 2.1. Sues.

Data for this study were obtained from vent release measurements conducted at two gas stations as part of rechnical assistance to the gas stations to quantify fuel vapor losses through the vent pipes of their storage tanks. A motivation for conducting the measurements was to perform a cost benefit analysis to compare the economic losses due to the lost fuel versus the cost of technologies that reduce the emissions. The exact location of the two gas stations is not revealed for confidentiality reasons. The gas station managers and staff who authorized the

Table 1

Benzewe exposure limits, to which we compared simulation results. For unit conversion, we assumed a temperature of 25 °C, i.e., 1 ppm  $\approx 3194 \, \mathrm{jg/m^3}$  (CAPCIA, 1997)

Agency	Name	Value (pph)	Value (pg/m³)	Exposure duration
California Office of Environmental Health Hazard Assessment (OEHHA)	REL	В	26	1 h
American Industrial Hygiene Association (AIHA)	ERPG-1	50	159,700	t h
AIHA	ERPG-2	150	479,100	1 h
Allfa	ERPG-3	1000	3,194,000	1 h
Agency for Toxic Substances and Disease Registry (ATSDR)	MRL	6	19	14 to 364 days

ERIC = Emergency Response Planning Guidelines. The primary focus of ERPGs is to provide guidelines for short-term exposures to airhorne concentrations of acutely toxic, high-primity chemicals.

collection and analysis of these data have not been involved in the current manuscript.

The first gas station, "GS-MW," was located in the US Midwest and is a 24-hour operation. The study was conducted from December 2014 to January 2015 for 20 full days, and fuel sales  $\dot{V}_{sales}$  were about 450,000 gal (1.7 million L) per month. Fuel deliveries to the gas station usually took place during the nighttime. The second gas station, "GS-NW," was located on the US Northwest coast and closed at night. Hours of operation were between 6:00 am and 9:30 pm on weekdays and between 7 am and 7 pm on weekends. That study was conducted in October 2009 for 18 full days, and fuel sales were  $\dot{V}_{soles}$  ~700,000 gal (2.6 million L) per month.

Both gas stations are considered to be high-volume, because they dispense >3.6 million gal of gasoline (both regular and premium) per year (CalEPA/CARB, 2005), and fuel was stored in underground storage tanks (USTs), which is typical in the US, Both gas stations had Stage II vapor recovery installed using the vacuum-assist method. In that method, gasoline vapors, which would be ejected into the atmosphere as a working loss during refueling of customer vehicle tanks, are collected at the vehicle/nozzle interface by a vacuum pump. The recovered vapors are then directed via a coaxial hose back into the combined storage tank ullage (head space) of the gas station. Stage I vapor recovery was also used at both gas stations during fuel deliveries. Both sites had a 3-inch diameter (7.5 cm) single above-grade vent pipe with belowgrade manifold that connected the vent lines from several USTs; the cracking pressures of the P/V valves were set to +3 and -8 iwc (+7.5 and -20 hPa).

## 2.2. Vent emission measurements

To quantify evaporative fuel releases through the vent pipe of a storage tank, the volumetric flow of the mixture of gasoline vapor and air was measured in the vent pipe. A dry gas diaphragm flow meter (American Meter Company, Model AC-250) was used. For each cubic foot (28 L) of gas flowing through the meter, a digital pulse was generated. Every minute, the number of pulses was read out and stored together with date and time on a data logger. Cas flow meters were obtained from a distributor calibrated and equipped with temperature compensation and a pulse meter.

To determine the time-dependent volumetric flow rate Q(t) of the gasoline vapor/air mixture through the vent pipe, the time series of measured flow volumes were integrated over an averaging period (15 or 60 min) and divided by the duration of that period, I.e., Q(t) is given by the number of pulses registered by the gas flow meter in a time window multiplied by 1 cubic foot and divided by the averaging time. The 15-minute averaging time was chosen to visualize time-dependent data, while the 60-minute averaging time was chosen because air pollution simulations were performed at that resolution.

Gas pressure p in the ullage of the storage tank was measured to assess vent emission patterns. For instance, releases can occur when the pressure exceeds the cracking pressure of the P/V valve in the vent pipe (the dry gas flow meter was fitted with a P/V valve on the outlet). Pressure was measured with a differential pressure sensor (Cerabar PMC 41, Endress + Hauser) every 4 s, and 2-minute average values

were stored. The sensor range was scaled from -15 to +15 iwc (-37 to +37 hPa), with a full scale accuracy of 0.20%. We also obtained 15-and 60-minute averaged tank pressure data p(t) where averages represent the means of the 2-minute average pressure measurements taken during each time window.

#### 2.3. Descriptive analysis

For the 60-minute flow rate, we calculated medians and inter quartile ranges (IQRs). To illustrate diurnal fluctuations in vapor emissions, we created box plots for the 60-minute flow rate distribution that occurred during each hour of the day. Spearman correlation coefficients between the time series for pressure and flow rate were calculated to evaluate whether pressure can be used to infer vent emissions.

To estimate the mass flow rate of gasoline  $\dot{m}_{\rm gco}$  that is released through the vent pipe in the form of a mixture of gasoline vapors and fresh air, we assumed, following the protocol of a study by the California Air Pollution Control Officers Association (CAPCOA) that assessed risks from fuel emissions from gas station (Appendix D-2 (CAPCOA, 1997)), that the density of gasoline vapors in this mixture is given by  $\rho_{\rm gc}^{(v)} = 0.3 \times 65 \text{ lb} / 379 \text{ ft}^3 = 0.824 \text{ kg/m}^3$ , i.e., the molar percentages of gasoline and air were 30% and 70%, respectively. Then the volumetric flow rate Q can be converted into a mass flow rate of the vaporized gasoline:

$$\dot{m}_{gas} = \rho_{gas}^{(v)} Q$$
 (1)

To arrive at vent emission factors, we first calculated the mean volumetric flow rate  $\overline{Q}$ , and then the mean mass flow rate  $\overline{m}_{gu} = \rho_{gu}^{(v)} \overline{Q}$ . From the latter, one can calculate the vent emission factor

$$EF_{went} = \overline{m}_{gas} / \dot{V}_{sules} \tag{2}$$

For EF<sub>ven</sub>, CARB uses units of pounds of emitted gasoline vapors (also called total organic gases (TOG)) per 1000 gal dispensed, or more briefly lb/kgal where kgal stands for kilogallons.

As we were not able to measure benzene levels in the tank ullage, we assumed like the CAPCOA study (Section C) that the density of the mixture of gasoline vapors and fresh air was  $\rho_{\rm mix}^{(v)} = 1.05 \, {\rm lb/ft^3} = 1.682 \, {\rm kg/m^3}$  and that the emitted gasoline vapor/air mixture contained 0.3% of benzene by weight (CAPCOA, 1997). Therefore, the mass flow rate of benzene through the vent pipe was estimated as follows:

$$\dot{m}_{benz} = 0.003 \ \rho_{mut}^{(v)} \ Q$$
 (3)

#### 2.4. Air pollution modeling

We used the AERMOD Modeling System developed by the US Environmental Protection Agency (EPA) to model the dispersion of benzene vapors released into the environment through vent pipes of fuel storage tanks and from other sources (Cimorelli et al., 2005). AERMOD simulates atmospheric pollutant transport at a 1-hour temporal resolution. 3D polar grids were created with the gas station in the origin and potential receptors at different radial distances (up to 170 m) and angles (10°

increments). The grids were placed at the ground level ( $z=0\,\mathrm{m}$ ), in the breathing zone ( $z=2\,\mathrm{m}$ ), and at the 2nd floor level ( $z=4\,\mathrm{m}$ ) where the vent pipe emissions were assumed to occur. The topography was simplified for modeling purposes consistent with the CAPCOA study (CAPCOA, 1997), i.e., the terrain was assumed to be flat with no buildings present. Vent pipe emissions were modeled as a capped point source. Chemical reactions of benzene were not modeled, as residence times of atmospheric benzene are on the order of hours or even days (ATSDR, 2007), i.e. much longer than the travel time of benzene vapors across the 340-m diameter model domain.

for the period of time when vent emission measurements were made, we obtained meteorological data at a 1-hour temporal resolution that are representative for the geographic locations of the two gas stations. Table SI-1 provides descriptive statistics of that data. The time series were used in AERMOD to model the transport of benzene in the temporally varying turbulent atmosphere. We also used the 1-hour average time series of benzene emission rates (Eq. (3)) as an input into AERMOD.

To evaluate at each grid point whether OEHHA's acute REL or AlHA's ERPG levels were exceeded at least once, we determined maximum 1-hour average benzene concentrations that were simulated for about three weeks. To evaluate how often the OEHHA REL was exceeded at each grid point in the breathing zone, we created plots indicating the number of exceedances and the day when the maximum benzene level was observed.

To facilitate comparison to published benzene measurements around gas stations, we determined for each simulated radial distance from a gas station the mean of the average concentrations simulated for each ten degree increment on the radius around the gas station.

## 3. Results: vent releases

# 3.1. Times series of tank pressure and flow rate

Fig. 2 shows the time-series data for the volumetric flow rate Q of the gasoline vapor/air mixture through the vent pipe and tank pressure p that we collected at the two gas stations. At GS-MW, little vapor was typically released in the late night and in the very early morning, while releases were generally much higher during the daytime and evenings, presumably when more fuel was dispensed (Fig. 2a). Occasionally, no vapor releases occurred for several hours. While we do not have access to time of fuel delivery records, field visits indicate that time periods with no releases coincide with fuel deliveries. For instance, fuel delivery likely occurred on January 6 at 7 pm (see Fig. 3a; an amplification of data shown in Fig. 2a). As a result, the UST pressure dropped by about 10 hPa, far below the cracking pressure of the P/V valve, The decreased gas pressure in the ullage increased until the cracking pressure of the P/V valve was reached. A very small vapor release (-2 L/min) was observed briefly on the next day at 2 am. The vapor flow rate becomes relatively large again, -12 L/min, only after 6 am, i.e., 11 h after foel delivery.

Fig. 3b amplifies a major vapor release at GS-MW. The UST pressure significantly exceeded the cracking pressure of the P/V valve and rose rapidly up to 37 hPa, which coincides with vapors being released at a high flow rate (15 min average) of about 470 L/min.

At GS-NW, vapor releases followed a quite different pattern (Fig. 2b). Contrary to GS-MW, vapor releases occurred in a cyclical pattern, and tended to be higher in the late night and in the very early morning when the gas station was closed.

# 3.2. Statistics of vapor emissions

The average volumetric flow rate  $\overline{Q}$  through the vent pipe for the entire period of time during which measurements were taken was  $\overline{Q} = 7.9$  L/min for GS-MW and  $\overline{Q} = 15.4$  L/min for GS-NW, which is

consistent with the higher sales volume  $V_{\rm Nidel}$  of GS-NW. These emissions consist of a mixture of gasoline vapors and air. Using Eq. (1), the volumetric flow rates were converted into average mass flow rates of gasoline:  $\overline{m}_{\rm KMS} = 0.39$  kg/h for GS-MW and  $\overline{m}_{\rm RMS} = 0.76$  kg/h for GS-NW. Using Eq. (2), we determined a vent emission factor EF<sub>vent</sub> = 0.17 kg per 1000 L = 1.4 lb/kgal for GS-NW and EF<sub>vent</sub> = 0.21 kg per 1000 L = 1.7 lb/kgal for GS-NW.

The medians (IQRs) for the 60-minute averaged flow rate Q (L/min) were 6.1 (1.9, 10.9) for GS-MW and 16.0 (12.7, 18.4) for GS-NW. For GS-MW, the mean is larger than the median, indicating a more skewed distribution of flow rates when compared to GS-NW. Also the first quartile is much lower than the median for GS-MW, indicating that there are periods of time during which little emissions occurred. Conversely, GS-NW was releasing emissions more consistently.

Fig. 4a shows boxplots illustrating the distribution of flow rate Q for each hour of the day at GS MW. Less vapor was released between 10 pm and 4 am, even though the gas station was in operation, albeit at lower activity levels. The flow rate Q at GS-NW (Fig. 4b) had fewer outliers, and the highest outlier was an order of magnitude lower than the highest one at GS-MW. Emissions were highest between 1 and 3 am, when the gas station was closed.

The Spearman correlation coefficients between tank pressure p and vent flow rate Q were r=0.58 for GS-MW and r=0.85 for GS-NW. Thus, vent releases are moderately and strongly correlated with tank pressure, respectively. Table 2 summarizes statistical properties of vent emissions at the two gas stations.

# 4. Results: air pollution modeling

#### 4.1. Emission sources and rates

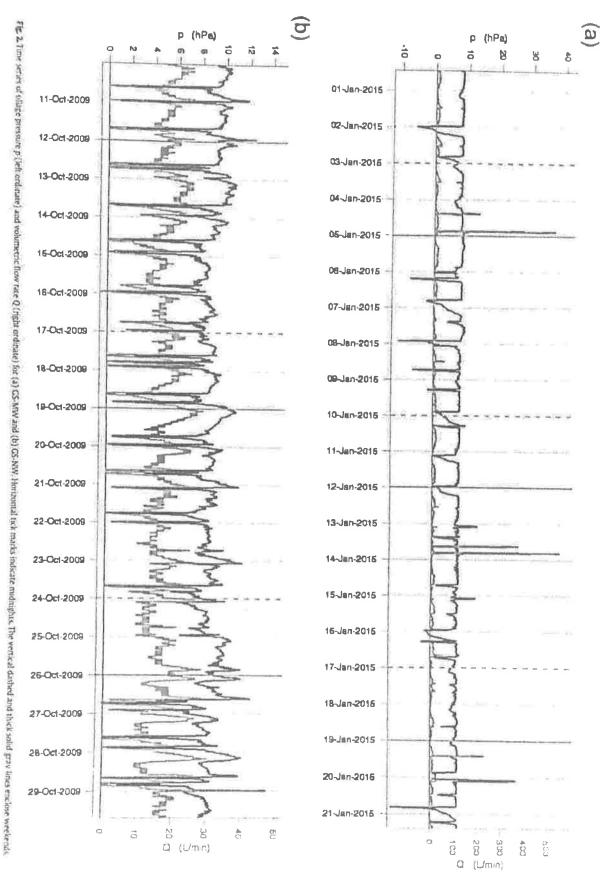
Vent pipe emissions of benzene were modeled at a 1-hour temporal resolution as described in Section 2.4. However, they are not the sole source of gasoline emissions at gas stations. Accidental spills from nozzles regularly occur near the dispensers, "refueling losses" can occur when gasoline vapors are released from the vehicle tank during refueling due to the rising liquid levels in the tanks, fuel vapors are released from permeable dispensing hoses, and "lugitive" or leakage emissions occur with driving force derived from storage tank pressure. In Section A of Supporting material, we detail how these other emission sources were modeled. Table 3 summarizes estimated mean emission rates. Note that the vent pipe losses are much greater than other losses.

# 4.2. Predicted benzene levels

Fig. 5 shows for both gas stations and at each grid point the maximum 1-hour average benzene concentration observed during the simulated periods in time. Benzene levels depend significantly on elevation within a 50-meter radius around the centers of the gas stations. Close to the centers of the gas stations, benzene levels are higher at the 4-m elevation and at ground level due to vent pipe emissions, which represent the largest emission source (Table 3). Further than 50 m away from the center, the vertical concentration differences become less obvious due to dispersion causing vertical mixing of benzene vapors.

At GS-MW, the 1-hour acute REL of  $26 \, \mu g/m^3$  was exceeded 160 m away from the center of the gas station, at the location ( $x=158 \, \text{m}, y=28 \, \text{m}$ ) both at ground level and in the breathing zone. At grid points with a distance  $\pm 50 \, \text{m}$  from the center of the gas station, the REL was exceeded at most once (Fig. SI-1a). However, the exceedance at different grid points did not occur on the same day (Fig. SI-1b). Within the 20 days during the measurement campaign, exceedances occurred on the 4th and 13th of lanuary.

At CS-NW, the furthest REL exceedance occurred at 50 m from the center of the gas station at the grid point (x = -38 m, y = 32 m) as



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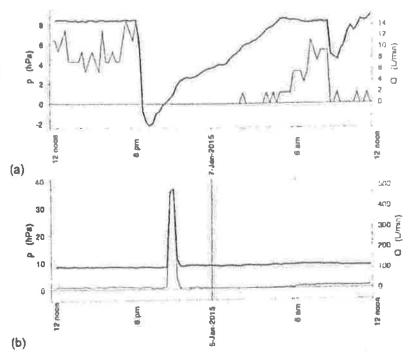


Fig. 3. Amplifications of time series data (15-minute averages) for CS-MW. (a) Tank pressure p became negative after fuel delivery. As a result, vent emission ceased for several hours. (b) A major vapor release (burst) likely occurred when the cracking pressure of the P/V valve was significantly exceeded at around 9-pm during a non-compliant bulk fuel delivery.

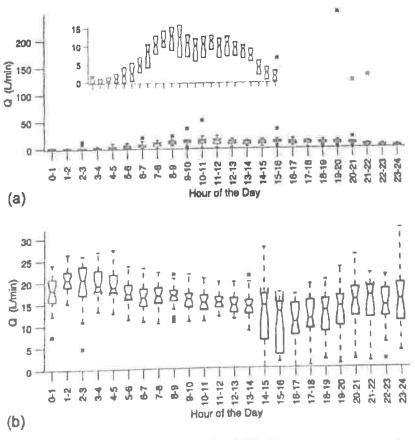


Fig. 4. Distribution of vent emissions Q observed for each hour of the day at (a) GS-MW [insert shows the IQRs of Q] and (b) GS-NW gas stations. In (a), outliers make it difficult to recognize variations in median hourly emissions. We therefore plotted in the insert only the IQRs. Boxes indicate median and IQR, whiskers values within 1.5 the IQR, and asterisks outliers.

Table 2 Summary of gas station characteristics and vent emissions.

A SALAM AND PARTY OF THE PARTY	CS: MW	GS-NW	Units
Sales volume V <sub>tales</sub> Volumetric flow rates	450,000	700;000	gal month
(of gasoline vapor/air mixture) MeanQ Median (IQR) of 60-min average Maximum of 60-min average Vent emission factor EF <sub>vent</sub>	7.9 6.1 (1.9, 10.9) 250 1.4	15.4 (6.0 (12,7, 18.4) 32.1 1.7	L/min L/min L. min lb/kgal
Mass flow rates of gasoline (w/o air) Mean $\overline{m}_{g,b}$ Maximum of 60-min average	0.39 †2.3	0.76 1.6	kg h kg/h
Correlation coefficient Between Q and p	0.58	0.85	3

shown in Fig. SI-2a. At a distance of 40 m, the REL was exceeded three times at one grid point (260° angle), and at 35 m four times at two grid points (250° and 260° angles) (Fig. SI-2b). At a distance of 20 m, the REL was exceeded at 30 (out of 36) grid points, and on nine different days.

Average benzene levels are shown in Fig. 6 for both gas stations. The MRL is exceeded at the elevation of the vent pipe opening,  $z=4\,$  m, up to 7 m away from for CS-MW and up to 8 m from GS-NW. Fig. 7 shows the average benzene concentration as a function of distance at an elevation of 2 m. Close to the center, benzene levels first increase and then decrease.

#### 5. Discussion

#### 5.1. Vent emission factors

We present unique data on vent emissions from USTs at two gas stations. Emissions can be compared to vent losses assumed by CAPCOA (CAPCOA, 1997). For a gas station with Stage I and II vapor recovery technology and a P/V valve on the vent pipe of the UST (Scenario GB), the CAPCOA study assumed loading losses of 0.084 and breathing losses of 0.025 lb/kgal dispensed. The total loss of gasoline through the vent pipe is the sum of the two and amounts to a vent emission factor EF<sub>vent</sub>= 0.109 lb/kgal. Based on actual measurements in two fully functioning US gas stations, we obtained EFwnt values of 1.4 lb/kgal for GS-MW and 1.7 lb/kgal for GS-NW, more than one order of magnitude higher than the CAPCOA estimate. While the difference between our measurements and the CAPCOA estimates may appear surprising, it is important to consider that the CAPCOA estimates are based on relatively few measurements and some unsupported assumptions (Aerovironment, 1994), particularly with regard to uncontrolled emissions due to equipment failures or defects (Appendix A-5 (CAPCOA, 1997)).

#### 5.2. Pressure measurements

Tank ullage pressure p was moderately to strongly positively correlated with vent flow rate Q, likely because exceedance of the cracking pressure of the P/V valve causes a vent release. Thus pressure

Table 3 Mean benzene emission cates m<sub>box</sub> for the two gas stations.

Emission source	Renzene emissions	(mg/s)
Cus station	GS-MW	CS-NW
Vent pipe	08.0	1,55
Spillage	0.39	0.65
Refueling	0.41	0.69
Hose permeation	0.06	0.10
Total	1.57	2.90

measurements can be used to infer vent releases, Real-time detection of equipment failures and leaks via so-called in-station diagnostics systems is based on our observed correlations between p and Q.

# 5.3. Diurnal fluctuations in vent emissions

Diumal vent emissions were quite different at the two gas stations. At GS-MW, a 24-hour operation, vent emissions were high during the daytime, presumably due to PWD. Emissions ceased at night, likely because less gasoline was dispensed and fuel deliveries with relatively cool product were frequent. Evaporative losses could also have been lower at night because the cooler delivered fuel would cause slight contraction of the liquid phase with corresponding growth in the ullage volume while at the same time lowering the vapor pressure of gasoline in the UST.

At GS-NW, vent pipe releases occurred most of the time, during the daytime when fuel was dispensed (PWD) and at night when the gas station was closed. Vent releases were higher when the gas station was closed, suggesting that during the day-time Stage II vapor recovery resulted in the injection of vapors into the storage tank that were not completely equilibrated with the liquid gasoline. During night-time, the gradual equilibration of unsaturated air in the ullage of the UST with gasoline vapors could then have caused exceedance of the cracking pressure of the P/V valve and consequently vapor release. It seems counterintuitive that less nighttime emissions occurred at the gas station where fuel was dispensed. However, while fuel is being dispensed, the outgoing liquid creates additional ullage volume, and depending on excess air ingestion rate, a negative pressure could result that lowers vent pipe emissions.

Dispensing fuel to customer vehicles and the associated Stage II vapor recovery system interact with vent emissions and can even cause vent emission during PWD, because the vacuum-assist method can negatively interfere with Onboard Refueling Vapor Recovery (ORVR) installed in customer vehicles (EPA, 2004). However, Stage II vapor recovery is not obsolete. It can be used in conjunction with ORVR to minimize exposure of gas station customers and workers to benzene due to working losses (Cruz-Nunez et al., 2003), particularly when customer vehicles are not equipped with ORVR (e.g., older vehicles, boats, motorcycles) or small volume gasoline containers are refueled. Enhanced Stage II vapor recovery technology can significantly reduce vapor emissions both at the nozzle and from UST vent pipes (CARB, 2013).

#### 5.4. Fuel deliveries and accidental vent releases

Based on observations and interpretation of time series of the tank pressure data, it is likely that the peak vent emissions (e.g., Fig. 3b) were partly due to non-compliant bulk fuel drops where the Stage I vapor recovery system either was not correctly hooked up by the delivery driver or to hardware problems with piping and/or valves. This

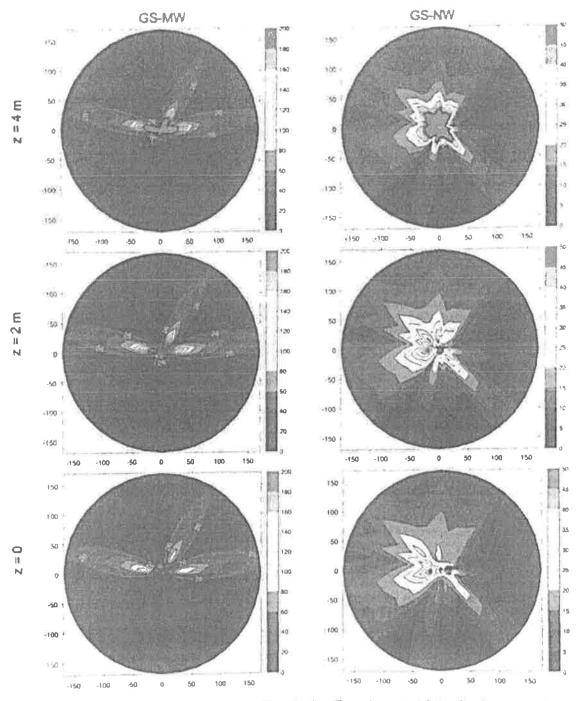


Fig. 3. Modeled maximum between encountrations for GS-MW and GS-NW at three different elevations a. The x- and y-axes indicate horizontal coordinates in meters. The color indicates between levels in units of µg.m<sup>3</sup>. Left column: time series of henzene emission rates were used. Right column: average henzene emission rate was used in the modeling. The white isoline indicates OEHHA's acute REL of 26 µg/m<sup>3</sup> = 8 ppb.

conjecture is consistent with typical US storage tank volumes (-10,000 to 30,000 gal). Assuming that Phase I vapor recovery did not work at all and that 10,000 gal (-38,000 L) of fuel were delivered, the working loss (volume of gasoline vapor/air mixture released to the atmosphere through the vent pipe) is 38,000 L. It is also reasonable to assume that delivery lasted less than 1 h. According to Table 2, the maximum hourly flow rate through the vent pipe was 250 L/min at GS-MW, which would result in a maximum cumulative vapor release of 15,000 L within this hour. The measured maximum cumulative release underestimates the

assumed working loss of 38,000 L. This could be due to a fuel delivery, which involved dropping fuel from multiple compartments of a tanker truck, with the vapor return hose not being correctly hooked up for only some of the emptied compartments.

At GS-MW, UST pressure decreased after fuel delivery (causing vent emissions to cease for several hours) during the climatic conditions prevalent during the observation period, behavior not observed at GS-NW, in practice, it is possible to observe both positive and negative pressure excursions, even during the same fuel delivery (when multiple fuel

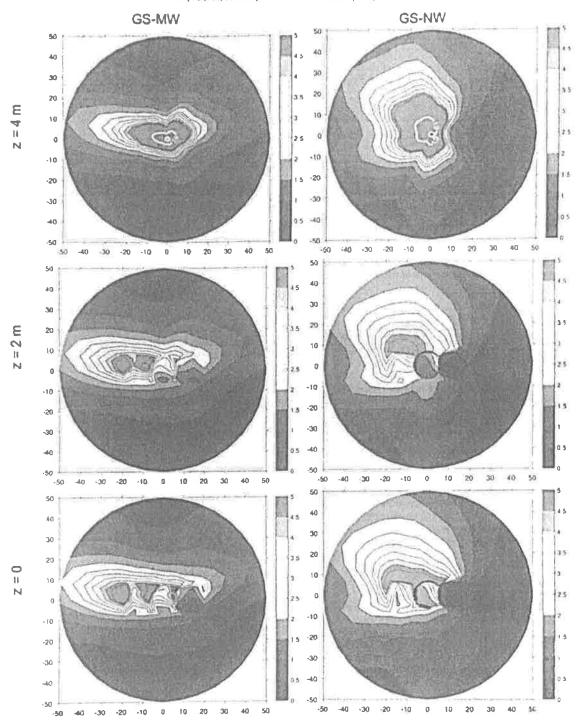


Fig. 6. Modeled average benzene concentrations for GS-MW and GS-NW at three different elevations 2. The x- and y-axes indicate horizontal coordinates in meters. The color indicates benzene levels in µg, m<sup>3</sup> and the white isoline the MRL of 19 µg/m<sup>3</sup> = 6 ppls.

compartments of tanker trucks are unloaded), when Stage I vapor recovery is in place (personal observation by  $\Pi$ ).

# 5.5. Exceedance of 1-hour exposure limits

AERMOD air pollution modeling suggests that at GS-MW the 1hour acute REL was exceeded at one grid point 160 m (525 ft) from the center of the gas station once in 20 days (Fig. 5). This distance,

is larger than the 300-ft (91 m) serback distance recommended by CARB for a large gasoline dispensing facility (CalEPA CARB, 2005).

Assuming the gas station's fence line is <225 ft. (69 m) from its center (where the vent pipe was assumed to be located), our study shows that sensitive land uses at a distance further than 300 ft from the fence line of the gas station would represent a health concern despite compliance with the CARB guidelines because of note compliance with the acute REED 3



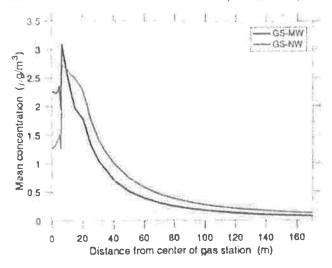


Fig. 7. Mean benzene concentrations as a function of distance from the center of the gas stations.

At any location further than 50 m from the gas station's center, the REL was exceeded at most once during the 20-day measurement campaign (Fig. SI-1a). However, exceedance occurred at several locations, and on two different days (Fig. SI-1b), E.g., at a distance of 120 m from the center, the REL was exceeded at three grid points, and the number of grid points increased with closer proximity to the gas station. This suggests that it was not just a single worst-case scenario or a single accidental vapor release that led to REL exceedance; rather exceedance may occur more frequently than is anticipated. Prevalent wind directions during the measurement campaign explained the directional patterns of exceedances (see the wind rose in Fig. SI-3a).

At GS-NW, despite its higher sales volume, the REL was exceeded only closer than 50 m from the gas station's center. However, exceedance occurred much more frequently (Fig. SI-2), likely because of the higher sales volume of GS-NW. Again, the wind rose for GS-NW (Fig. SI-3b) explains spatial patterns of REL exceedance.

None of AIHA's three ERPG levels were exceeded, meaning that individuals, except perhaps sensitive members of the public, would not have experienced more than mild, transient adverse health effects.

# 5.6. Average benzene levels

The initial increase in average benzene levels when moving away from the gas stations' centers (Fig. 7) is likely due to the vent emissions (at 4 m) which represent the largest benzene source, and which require a certain transport distance until they reach the 2-m level through dispersion. Further away from the gas station, benzene levels are higher for GS-NW than for GS-MW likely because of the higher sales volume of GS-NW. However, close to the center, benzene levels are higher at GS-MW. This can be attributed to the higher wind speeds at GS-NW (Table SI-1), which result in greater initial dilution of emitted pollutants in the incoming airstream and also in greater subsequent pollutant dispersion.

Modeled average benzene concentrations are generally lower (~10 kg/m² or less) than those measured in the surroundings of gas stations, likely because our simulations do not account for traffic-related air pollution (TRAP). For instance, a study published by the Canadian petroleum industry found average benzene concentrations of 146 and 461 ppb (466 and 1473 µg/m²) at the gas station property boundary in summer and winter, respectively (Akland, 1993), values orders of magnitudes higher than ours. A South Korean study examined outdoor and indoor benzene concentrations at numerous residences within 30 m and between 60 and 100 m of gas stations and found median outdoor benzene concentrations of 9.9 and 6.0 µg/m², respectively (Jo &

Moon, 1999), while we simulated benzene levels on the order of T pg/m³ (Fig. 7). In a study on atmospheric BTEX levels in an urban area in Iran, the three highest BTEX levels were measured near gas stations (~150 m away); the measured benzene levels ( $64 \pm 36$ ,  $31 \pm 28$ ,  $52 \pm 26$  pg/m³) were again much higher than ours simulated at that distance, likely due to TRAP. Our modeled average benzene levels at a distance of about 50 m are on the same order as background benzene levels of 1.0 µg/m³ that were measured in 2010 in the National Air Toxics Trend Sites (NATTS) network of 27 stations located in most major urban areas in the US (Strum & Scheffe, 2016). However, our modeled levels at a distance of 170 m were 0.07 at GS-MW and 0.12 at GS-NW, a non-negligible addition to urban background levels.

At both gas stations, the MRL was exceeded at the level of the vent pipe opening in the vicinity of the gas stations, up to 7 m away from the vent pipe at GS-MW and 8 m at GS-NW. Therefore there might be an appreciable risk of adverse noncancer health effects for individuals living at the 2nd-floor level relatively close to high-volume gas stations such as GS-MW and GS-NW.

### 5.7. Limitations

A limitation of our study is that data were collected only in fall and winter. Results cannot be easily extrapolated to other seasons, because vent pipe emissions are seasonally dependent, e.g., due to seasonally dependent gasoline formulations and meteorological conditions. However, modeled exceedance of the OEHHA acute REL in the winter season is already of concern, because that REL was developed for once per month or less exposures.

Another limitation is that we did not directly measure benzene levels in the vent pipe, and instead made assumptions about vapor composition that were also made in the CAPCOA study (CAPCOA, 1997) of gas station emissions. In practice it may be difficult to obtain permission from gas station owners to measure benzene levels directly.

In part because we did not want to reveal the locations of the gas stations, we did not use site-specific topography information in the air dispersion modeling and instead assumed flat terrain. While this simplification results in less accurate air pollution predictions for the two sites, using a "generic" gas station is perhaps more representative of other gas station sites, and is consistent with an approach used in a previous study (CAPCOA, 1997).

Finally, our study did not predict benzene levels in indoor environments. Even though indoor air pollution levels may substantially differ from outdoor levels due to indoor sources (e.g., smoking, photocopying) (El-Hashemy & Ali, 2018), our study can still inform exposure levels in indoor environments as outdoor sources may be the main contributors to indoor air pollution, e.g., in buildings situated in urban areas and close to industrial zones or streets with heavy traffic (Jones, 1999). This is relevant to workers and customers in C-stores or other fast-food/gasoline station combination facilities.

#### 6. Conclusions

Our study is to the best of our knowledge the first one to (1) report hourly vent emission data for gasoline storage tanks in the peer-reviewed literature and (2) use these data in hourly simulations of atmospheric benzene vapor transport. This allowed us to examine potential exceedance of short term exposure limits for benzene. Prior studies including CAPCOA's (CAPCOA, 1997) could not do so as average emission rates were used (only meteorological data was used at an hourly resolution).

Our findings support the need to revisit setback distances for gas stations, which are based on >2-decade old estimates of vent emissions (Aerovironment, 1994). Also, CARB setback distances are based on a binary decision, related to whether the gasoline sales volume  $\dot{V}_{soler}$  is >3.6 million gal per year. Our data support, however, that setback

distances should be a continuous function of sales volume  $V_{color}$  and also include the type of controls installed at the facility. Setback distances should also address health outcomes other than cancer. OEHHA's acute REL for benzene could be used to inform setback distances as it accounts for non-cancer adverse health effects of benzene and its metabolites (Budroe, 2014). ATSDR's MRL could also be considered since it is a health based limit.

We note that CARB recommended their setback distances in 2005, presumably assuming pollution prevention technology yielding a 90% reduction in benzene emissions (CalEPA CARB, 2005). Since then, CARB further promoted use of second-generation vapor recovery technology (Enhanced Vapor Recovery, EVR) to reduce emissions further. EVR includes technology that is supposed to prevent fuel vapors in overpressurized tanks from being expelled into the atmosphere (CARB, 2017). To that end, "bladder tanks" have been proposed, into which the gasoline vapor/air mixture is directed as the pressure in the combined ullage space of the storage tank increases, and from which the mixture is redirected into the fuel storage tanks if the ullage pressure becomes negative (when fuel is dispensed). The challenge with such a system is to ensure that the bladder tank capacity is not exceeded by the fuel evaporation rate. Alternatively, fuel vapor release can be reduced by processing the fuel air mixture through either a semipermeable membrane which selectively exhausts clean air and returns enriched fuel vapor (Semenova, 2004) or an activated carbon filter which adsorbs hydrocarbons (and water vapor) and exhausts air into the atmosphere, or by combusting the fuel/air mixture which would otherwise be released through the P/V valve, Therefore, current CARB setback distances might be adequate for gas stations in California but less so for the other 49 US states, and other countries-depending on pollution prevention technology requirements.

The larger areal extent of modeled REL exceedance at GS-MW is due to "accidental" releases of gasoline vapors. Even though regulations appear generally not to be driven by accidental releases, at GS-NW such releases likely led on two different days to REL exceedances at distances beyond CARB's recommended setback distances. Policies should address accidental fuel vapor releases that depending on pollution prevention technology (here Stage I vapor recovery) and its proper functioning can occur on a frequent basis (twice at GS-MW within about three weeks).

In future work, potential exceedance of other shorter-term exposure limits should be examined, e.g., the 15-minute short-term exposure limits (STELs) and the 8-hour time-weighted averages (TWAs) used for occupational exposures.

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# Competing financial interest declaration

TT directs a company (ARID), which develops technologies for reducing fuel emissions from gasoline-handling operations. AMR, BAM and MH have no conflicts of interests to declare.

# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.scitotenv.2018.09.303.

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# PERFECT PAIRINGS FOR C-STORE PROFITS





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# FBI Releases 2016 Crime Statistics

The number of robbery offenses at convenience stores rose the most in 2016.



September 26, 2017 @

WASHINGTON - Violent crime increased for the second consecutive year, while property crime decreased for the 14th straight year, according to the FBI's annual report on national crime statistics. Overall violent crime rose 4.1% last year, while property crime fell 1.3% compared to 2015 figures.

Compared with 2015, the report found that the number at convenience stores rose the most among six of the seven locations tracked in 2016. Last year there were 17,401 robberies in convenience stores, a 6.7% from 2015. For gas or service stations, there were 8,178 robberies, up 2.1% from 2015.

Crime in the United States, 2016 is a compilation of information reported to the FBI's Uniform Crime Reporting (UCR) Program by more than 16,000 law enforcement agencies nationwide.

The report showed there were an estimated 1.2 million violent crimes in the U.S. last year. Though the violent crime numbers rose from 2015 to 2016, the five-year and 10-year trends show an increase from 2012 (up 2.6%) and a decrease from 2007

(down 12 3%)

Additional statistics from Crime in the United States, 2016 include:

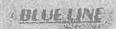
- Of the violent crimes reported to police in 2016, aggravated assault made up 64-3%, while robbery was 26.6%
- About 7.9 million property crimes were reported to the UCR, with losses (excluding arson) of about \$15.6 billion.
- The report estimates that law enforcement agencies made about 10.7 million arrests in 2016 (excluding arrests for traffic violations).

Crime in the United States, 2016 also includes the additional publications Federal
Crime Data, Human Trafficking, and Cargo Theft.

In his message accompanying the report, FBI Director Christopher Wrey called on law enforcement agencies to continue transitioning to the more informative National incident-Based Reporting System (NIBRS). Use of NIBRS data, which will be the national standard for crime reporting by 2021, will provide additional transparency. Wray called for the country to "get beyond encodetal evidence and collect more comprehensive data so that we have a clearer and more complete picture of crime in the United States." He also noted the creation of the FBI's database to collect law enforcement use-of-force statistics to facilitate an informed dialogue within communities.

"The more complete the data, the better we can inform, educate, and strengthen all of our communities," Wray said.

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September 6, 2016

# Convenience Store Case Study

# Overview:

There are over 154,195 convenience stores in the US and the number of new stores is expected to grow double digits for the coming years. This shopping phenomenon represents 34% of retail sales in the US currently. Simple statistics show over % of all lottery tickets are sold through convenience stores and over 80% of convenience stores sell beer for example. A key to convenience store success is easy access to interstate and main thorough fare streets. This provides a detriment to the "predominant cash" business model in that it is also easy access for robbery and theft.

There are over 32,000 robberies a year in convenience stores and nearly 11,000 of those will be robbed multiple times. The rate of robberies has been described as an epidemic and unless cost effective preventive actions are taken, customers and employees will continue to be at serious risk. Most of the reported violent crimes occur at night in these locations.

The resulting damage from convenience store robberies can be physical, economic, and psychological in nature. A convenience store which is repeatedly robbed for specific merchandise can influence higher prices on certain products or as a precautionary action, the store may no longer carry the merchandise reducing overall sales. Independent stores owners can be more directly affected due to their size and ability to absorb loss and may not be able to recover from a robbery. The average cost to employers of a single episode of workplace violence can cost between \$25,000 and \$250,000 in lost work time and legal expenses. Customers who suffer injury along with the employees resist in face-to-face confrontations can lead to higher injury rates. Trauma can result in daily operations with loss of customers and also employee moral which can lead to loss of employee staff and loss of merchandise sales which can force some convenience stores to potentially close. Employee turnover rates for the CS is extremely high as well with the major cause being the implied safety/security concerns.

Aside from video surveillance which is almost always forensic in nature and assists ofter an incident has occurred, there are typically two solutions proposed to the convenience store industry. The first is a "wall through" cash window. This is a designed to provide safety to the store operators but prevents shopping for other tangible things that bring thousands of dollars of revenue per week to a store. The cost of this solution is nearly \$10,000 for construction, purchase of the cash drawer unit and installation. Another key point is many municipalities don't like or approve the image a wall through cash drawer portrays in their areas. Another key consideration of a wall drawer solution is the loss of revenue. If an average patron spends an additional \$5/visit and there is the opportunity for 100 patrons an evening, then over a 365-day period the potential loss of revenue is staggering (\$182,500).





Fast Food Restaurants and Convenience Stores: Using Sales Volume to Explain Crime Patterns in Seattle Crime & Delinquency 1–22

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**SAGE** 

Amber Perenzin Askey<sup>1</sup>, Ralph Taylor<sup>2</sup>, Elizabeth Groff<sup>2</sup>, and Aaron Fingerhut<sup>3</sup>

# L'Abstract d

This study investigates how convenience stores and fast food restaurants influence crime patterns over time. Using sales volume data from fast food restaurants and convenience stores, we examine streetblock crime levels over a seven year period in Seattle using multilevel models. Results demonstrate that high sales volume links to high crime, even after controlling for local socio-economic status, the effects of retail businesses, and local crime trends. In addition, street segment crime trajectories were spatially clustered in a significant way. The dynamics that explain why specific types of commercial facilities link to street crime need further theoretical clarification. This is the first study demonstrating significant spatio-temporal patterning of streetblock crime trends.

# Keywords

fast food restaurants, convenience stores, land use, multilevel models

Corresponding Author:

Amber Perenzin Askey, The Police Foundation, 1201 Connecticut Ave NW, Suite 200, Washington DC, 20036, USA.
Email: aaskey@policefoundation.org

The Police Foundation, Washington DC, USA Temple University, Philadelphia, PA, USA

Fidelity Investments, Jacksonville, FL, USA



A second solution for late night business is the building of an indoor encasement of "bullet proof glass". This allows patrons access to the inventory for other purchases but is an expensive proposition that typically is an eye sore to the customer experience as well. The cost of the Bullet proof solution is well over \$10,000 and the loss of merchandise theft typically increases from shoplifters as the store clerk is reticent to be outside of their enclosed area. Looking at the math equation a little differently a simple calculation identifies that the shoplifting rate can increase from a typical scenario of 3% to an increased level of 5%. Keeping time frames consistent the loss potential is north f \$13,000/year in income.

The third solution is a human guard or officer to protect the store, especially at night. The typical guard deployment is very expensive, and costs approximately \$43,000 per year for one 8-hour shift per day. Guards have proven to be effective, however also bring numerous liability risks to the businesses. Guarding services have varying degrees of professionalism and deterrence potential and they often have turnover issues as well.

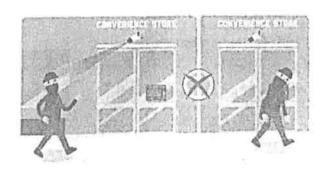
The fourth option is to close during hours when stores are most at risk for violent crime.

# The Opportunity:

Each of the above security solutions go against the goal of being "friendly and welcoming." While safety is a primary consideration of their operators and patrons, the desire is that the local convenience store becomes a place where the customer is appreciated and enjoys a good shopping experience. There is nothing about the proposed solutions above which leads to achieving this goal, other than the person may not be involved as the victim of a violent crime. They are costly fixes which create an atmosphere of isolation and perception of high crime.

# The Solution

Blue Line Technology has developed an application solution that is designed to thwart robberles, and create an immediate deterrent and prevention to criminals. With over 120 years of law enforcement experience in crime prevention, Blue Line Technology has studied this application and has provided a solution where you can support the convenient stores' mission to creating the best experience for their patrons. Further, the resulting safer work environment has been documented in interviews with employees. Store employees immediately understood the functionality of the system and its potential to keep them safe. The "First Line" facial recognition/ID verification can be implemented to prevent undesirables and masked criminals from entering the premises, and the employees openly expressed gratitude their employer had purchased a tool to keep them safe.





Recognition were pulled and studied and compared to crime stats after the software was put in place. Patrons are aware of access control change to the night time activity of the store. This test will study the changes and/or behaviors in criminal activity and if it has a direct affect to the store, the employees, and the patrons who regularly visit the store.

# Period of Testing:

Crime stats that were available for publication were pulled and assessed around the stores location. The Crime stats were pulled from for a previous period from April 2016 – July 21, 2016. The final install was July 21, 2016.

Crime stats will continue to be tallied and added to this report up to a 6-month period from July 21, 2016 — December 2016. \*\*\*This is an ongoing test at this time and report will be updated as results are tallied and accounted for. \*\*\*

#### Test Performed:

This store resides in the tail end of a district in a metropolitan city The rest of the store areas in the study are covered by bordering municipalities police departments and a river leading to another state.

Crime stats pin-dropped on relative maps (see figures 4, 5) represent convenience store, c-mart, gas station, liquor mart robbery's within a certain vicinity of the location which has facial recognition access control for night time entry. The indicated robbery's from the crime stats are from the date April 2016 – July 21, 2016 from the time of 7:00 to 8:00PM till 5:00 to 6:00AM. (See Results for reasons of increase time past locking hours of 9:00PM to 6:00AM) Maps from April, 2016 – July 21, 2016 will be created. A separate map will reflect crime stats after the install date from July 21, 2016 – December 2016. Crime that has occurred at the test store, police reports dictate both robberies occurred while the suspect was masked.

Calls to service to the store in the study were also recorded for one-month prior at this address and compared to one month after. . The calls to service will continued to be monitored until December 2016.

# Stats Summary "Before":

Direct Stats: (From April-July 21, 2016) (See Figure 4)

04/07/2016 @ 5:44AM - Robbery with Weapon/successful - Masked

05/22/2016 @ 3:20AM - Robbery with Weapon/successful - Masked

Calls to service: (From June-July 21st 2016) (See Figure 4)

07/01/2016 @ 3:42AM - Agg Assault w/knife near Riverview exit and 270

07/15/2016 @ 6:31PM - Larceny-Mtr. Vehicle under \$500

07/17/2016 @ 1:43PM - Suspicious Person

07/18/2016 @ 5:09pm - Suspicious Person

07/18/2016 @ 8:00AM - Burglary from Business Reported

07/20/2016 @ 3:19AM - Agg Assault w/firearm near Riverview exit and 270



The product works in conjunction with existing surveillance systems and provides the operators the ability to keep the undesirable outside the premises and gives time so they can call for support from local agencies. The access control functionality can be outfitted with a switch operated by the cashier/clerk that allows them to actuate the system at a particular time in the evening or if they see any unwanted activity or violence outside the convenience store, they can immediately lock the door to keep indoor employees and patrons safe.

Blue Line conducted VOC (voice of the customer meetings) with key industry leaders considered "advanced thinkers and early adopters" of technology designed to enhance the customer experience and they immediately saw how the proposed solution could benefit their employees as well as provide a better experience for his patrons. They substantiated the market situation faced by convenience store operators and added in some cases stores see 750 to 1,000 people per day. A large percentage of these (nearly 1/3) are after the hours of 10:00 pm when most crime occurs. They further went on to explain that some stores are prone to criminal behavior because of their location in proximity to highways. Some of the busiest stores described fall into the pool of repeated robbery statistics in early 2016. They are looking for a solution that employees could embrace that would also conform to the municipalities request for open interaction with patrons.

In our test cases the store managers were allowed to work with the Blue Line product, interact and help design the implementation. Immediately the solution resonated with the store operators and in the first operational day – one operator, refusing to work the night shift reported that with this product implementation she would transfer to the night shift immediately, while another operator stated he was very pleased that his personal safety was in the thoughts and actions of the ownership of the store.

# **How It Works:**

The doors are locked using magnetic locks. A camera is strategically placed at the entrance and is used to read a patron's face as they approach the store. Signage is used to clearly tell customers to look at the camera for entry. When a face is read, the magnetic lock is immediately actuated and the patron is allowed inside. This process happens "on the walk." In the event a masked person approaches, he/she must either remove the covering to have the system record their face, or they will not be granted access. After careful review, clerks can choose to let this person in if they wish. Like other surveillance video cameras, a recording is made of entries and an ID number assigned. The video is maintained for a period controlled by the store manager or company protocol, similar to existing surveillance footage. If there is a need to review the footage (theft occurred, etc.), the store manager can then place the subject's face into the system for future immediate notification of criminal activity. The known threat can be kept from entering the store if desired.

In the convenience store application, the appliance housing the software is a small device that fits easily in a back room or lower shelf. A monitor is strategically mounted for ease of visibility by clerks. Predetermined messaging instantly appears on the monitor instructing clerks how to respond if a threat is encountered. The clerks typically will not have the administrative privilege to do entries or other activities. The clerks simply see the person's entry as either a red (threat), green (known safe employee), or unknown (safe customer). The enhanced video capability is set to run constantly throughout the day, even when doors are unlocked. The operators have a simple on/off switch that they can manipulate, turning the locks to active at any time they observe something outside that may threaten the safety and security of the employees and customers. Individual stores can format the system to their protocols.





Figure 1

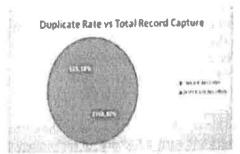


Figure 2

This test results demonstrate that the employees did not have a significant influence on overall facial readings. All store attendants were visible and wore polos with the store insignia. These records were counted towards the employee column. The conclusion is that the system did not impact workers practices negatively as supported with follow up interviews.

# Traffic Flow:

From 9:00 PM to 6:00AM traffic to the store was at its highest from 10:00PM to 11:00PM. The stores lowest traffic point was 4:00AM to 5:00AM. (See Figure 3) Capture activity was monitored daily. If known hours of operation were slower than previous days, the host could review recordings from that night to ensure the door was locked and to verify patron traffic was just low during the recorded time. This action was never taken as results continued to show patron traffic steady during the appropriate times.

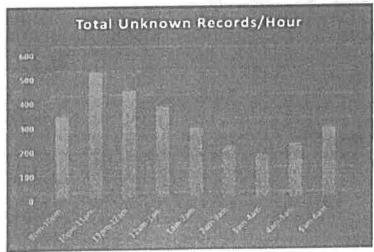
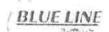


Figure 3

# **Crime Activity Comparison Study:**

Objective:

Crime for this particular store has been on the rise as of 2016. Crimes stats for 6 months prior to Facial



# **Field Test:**

Over the past several months Blue Line Technology conducted two field tests working with store owners and managers. The objectives and results are provided.

# Store #1 Objective:

The first field test was provided to a corporate owned entity that has nearly 100 stores in a 5 state region. Their primary concern was employee safety and delivering a friendly customer experience. The Facial Recognition solution was installed at Store #1 for face capture to unlock store entrance at night. The operator was given control to manipulate and lock the door locks at a required set time from 9:00 PM to 6:00 AM. The test was run for a period of 30 days and registered and accounted for total unique records via access control from Store #1. The test demonstrated that when the patrons interact with the system, the process is easy and user friendly.

# Period of Testing:

July 21, 2016 to August 21, 2016

#### Test Performed:

All individuals were categorized unknown records and were captured for access entry into the business. Store attendants were required to lock the door from 9:00PM to 6:00AM.

Each unknown capture record was directly emailed to host, and accounted for each night. Testing will dictate difference between "Unique Record Capture" records and "Total Records Captured".

#### Test Performed:

All individuals were categorized as "unknown" records and were captured for access entry into the business. Store attendants were required to lock the door from 9:00PM to 6:00AM.

Each unknown capture record was directly emailed to host, and accounted for each night. Testing differentiated between "Unique Record Capture" records and "Total Records Captured".

To distinguish between the two categories, a unique record capture takes into account a read if it occurs over a few second period and counts it as one unique read. The subsequent capture records will be accounted for in "Total Record Captures". Duplicates records account for patrons who stood longer than needed, looked away and then towards the door to open, and conversing with other patrons, etc. If the same person came back at a different recorded time, they are considered unique again in order to have door access.

Employees were counted and tallied in separate columns to ensure that they were not included in the total record capture. Employees do enter the front door for shift changes, or for breaks.

#### Outcome:

For a 30-day period over 2883 total unknown records were captured. From the record count, 98%(2837) of unknown records were gas station patrons and 2%(46) were employee's records. (See Figure 1) Unique captures that resulted in access control was a total 2368; 2334 were unknown unique faces and 34 were employees. This leads to 18% of the unique faces resulting duplicate facial reads. 98% of the total facial reads were that of unknown gas station patrons. (See Figure 2)

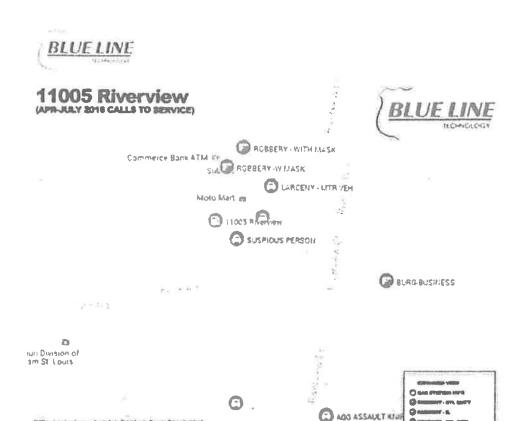


Figure 4

# **Chart Stats After**

11005 Riverview Direct Stats (From July 21st- December 2016) (See Figure 5)

None reported as of August 26, 1026

\*Test is still being conducted\*

Calls to Service: (From July 21<sup>st</sup>- December 2016) (See Figure 5)

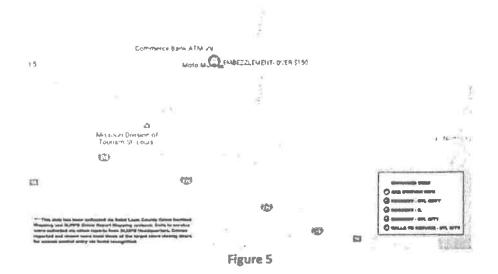
07/26/2016 @ 11:31Pm - Embezzlement-Over \$150

\*Test is still being conducted\*



# 11005 Riverview





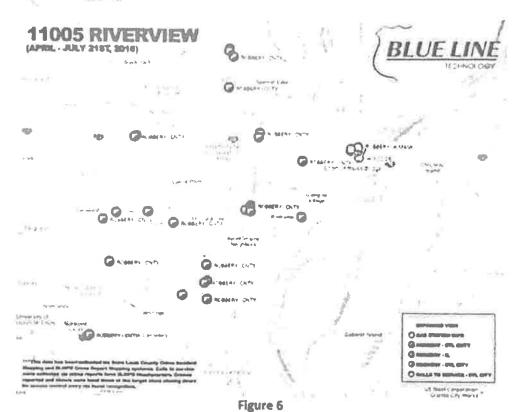
# Crime Stats (Robbery): (From April-July 21, 2016) (See Figure 6 & Figure 7)

Crime stats pin-dropped on relative maps represent convenience store, c-mart, gas station, liquor mart robbery's within a certain vicinity of the location which has facial recognition access control for night time entry.

Patterns showed that robbery related crime was at highest time between 8:00PM – 1:00AM. These include the robberies that also have taken place within our own test store. Calls to service around the store included suspicious persons, theft from vehicles, and assaults.

County Data does not reflect if all robberies were masked or unmasked at the time of entry. City crime data that we were able to obtain for the two robberies that occurred at the test store did show the suspect was masked during both separate events. Note: National articles have reported that 98% of these crimes are masked assailants.





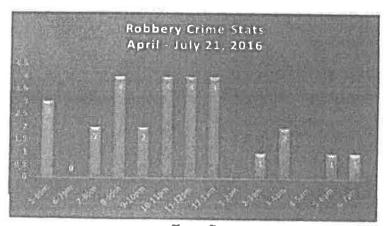
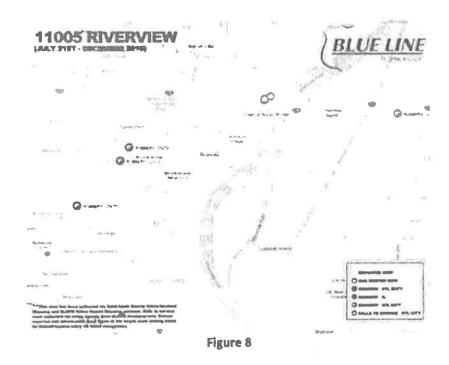


Figure 7



Crime stats pin-dropped on relative maps represent convenience store, c-mart, gas station, liquor mart robbery's within a certain vicinity of the location which has facial recognition access control for night time entry.

Current crime stats show that within the last month, robberies are continuing to occur. High robbery crime times are still occurring around the same estimated time frame of 8:00PM – 1:00AM. Calls to service within a month before and after comparison dropped significantly to one call. This was a result in an employee who was caught stealing/taking items of value from the store.



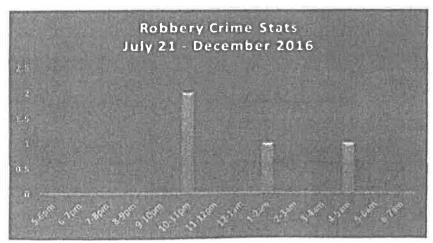


Figure 9



#### Results:

After the first initial 30 days of Install our representatives and techs re-visited the store manager and asked some preliminary questions about the application and about how the patrons of the store have reacted to the new technology. Overall experience with the technology is that they have an average of 250 customers at night, and so far, an estimate of 10 people have seen the system and have left the premise. Patrons who are women (customers and employees) love the system. Several women customers have commented that the system makes them feel safer during their visit at night.

Employees love the system, find the overall process easy to use and interact with. The store manager has reported that he has been able to move affected employees of prior instances back to the night shift. Patrons have responded to the system and have adapted quickly to the new method entry. There are some patrons the employees have to address how to use, but they show the patrons and interactions between customer and employee are very positive and receptive.

Calls to service to the store location have dramatically reduced 85% comparing July to August. The store manager is very pleased with this result as he has the potential to remove negative interaction with suspicious persons, loitering, and vehicle theft interaction. Crime with the local area have remained constant. A most recent robbery that happened one exit away, August 12, 2016, at a Waffle House before 5:00AM. Suspects held patrons at gunpoint, and another suspect shot of his weapon in an attempt to show he was serious and demanded cash. Both robbers were masked and heavily armed.

In conclusion, building a working relationship with the convenience store and understanding their current situation has allowed us to demonstrate and facilitate robbery prevention. The times of high-crime and night activity, the store is closing the doors to activate facial recognition entry. Crime stats at this location and another St. Louis store location using BL facial recognition access control has shown almost all robberies were done by armed and masked offenders. (See Figure 10)

The convenience store has no justification to store any record information unless the particular patrol creates a crime. Providing an extra layer of security and reporting methodology for the convenience store will aid in collaborative efforts in community policing with local law enforcement.

Store Location #1 demonstrates that it is taking proactive measures to improve private security, target repeat offenders, and deter petty crime from occurring on the property. Though traffic flow, Blue Line's Facial Recognition technology has had no detrimental impact to customer experiences, and have actually proven a positive increase in customer experience though safety and security.

#### The benefits include:

- 1. Addressing a vital concern of store managers (safety of their night time staff and customers)
- 2. Hiring and retention of night time employees
- 3. Awareness to safety using the newest technology is substantially increased
- 4. Operational Cost Savings Include
  - a. Reduce need for expensive guards



- b. Minimization of shoplifting, a side benefit
- c. Reduced risk of injury and subsequent legal action
- d. Limit negative interaction with local government about crime issues
- e. Allow more stores to stay open 24 hrs

#### **Projected Hard Cost Savings:**

- 1. Reduce Guard coverage by 50% From two guards to one (\$50,000 annually)
- 2. Productivity of clerks Hiring costs often \$12,000 annually per store
- 3. Reduction in shoplifting \$18,000 annually per store
- 4. Enhanced experience because undesirables do not shop at the store and intimidate good customers

#### **Actual photo of Store Facial Recognition System**



#### Store #2

#### Objective:

The independent CS store owner (having under 5 stores) expressed his interest in the system because of the high crime rate and rash of late night business robberies with masked and unmasked gunmen in the immediate area. This store had not experienced a robbery to date but the growing concern had mounted in the months leading up to the decision. The store owner reported — my desire was to take preventive action that discouraged criminal behavior. As in the previous test case the employees were given the opportunity to learn of the system and the capabilities and then participated in the installation definition/design for their store.

This store ranged between 30 and 50 visitors in the hours from 10:00 pm to 5:00 am. During the day the store was seeing nearly 30 people an hour. Customers have adopted the system readily and report a confidence level as they enter and exit the store.

#### Period of Testing:

In the period of (March 1, 2016 – September 1, 2016) 183 days and the area was designed as the store plus a 2-mile radius.

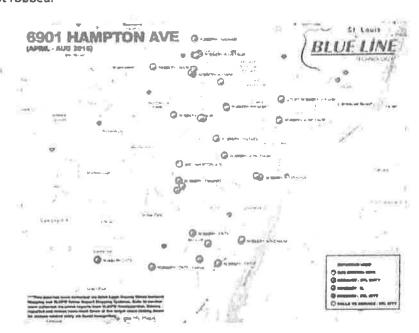
#### **Test performed**

A two camera system was installed covering the two entrances into the store – one on each entrance. The system was turned on March 1, 2016. Initially no "threats were inserted into the data base" and on day 180 the store owner reported no incidents at the store and therefore had not added any known threats to the location.



#### Outcome:

During the time frame of the test -- There were 22 robberies with masked gunmen and 8 robberies with unmasked gunmen in a 2- mile radius of the convenience store. All of the Indicated robberies were late night between the hours of 10:00 pm and 5:00 am. The store in this study, with the Blue Line Facial Recognition installation was not robbed.



#### Summary

There is a growing safety concern with late night business experiencing armed robberies and mischlevous behavior that has led to detrimental customer experiences and employee turnover rates for these properties. The Blue Line "First Line" facial recognition has proven to be a cost effective solution strategy for keeping problems away from the store and adjoining property. The application implementation, designed with seasoned law enforcement expertise, has been effective in reducing costs of operations, increasing employee morale and consumer confidence in the municipality. The convenience store owners/managers have proclaimed the original goals of employee safety, a community based safe shopping experience has been achieved with the installations of First Line. The cost of the solution was much lower than anticipated and the aesthetics helped provide a welcoming atmosphere with a certainty of deterrence.

#### Reported by D&D (Downing & Downing, September 6, 2016)

Retailers to spend \$23 billion in 2016 on injuries, cyber, and other insured risks

- Roughly half a penny out of every retail dollar goes toward insurance

Milliman, Inc., a premier global consulting and actuarial firm, today released the 2016 Retail Cost of Risk, which measures the cost of property and casualty risks faced by retailers. In 2016, the average cost of risk for U.S. retailers is projected to amount to \$5.93 per \$1,000 of sales. Around 60% of the costs is attributable to the injuries of employees and customers; workers' compensation costs represent around 40% of the overall risk and the cost of customer injuries represent around 20% of the total. Other risks, including property damage, cyber, and miscellaneous liabilities, account for the remaining 40%.

October 7, 2014

#### Small spills at gas stations could cause significant public health risks over time

by Johns Hopkins University Bloomberg School of Public Health

A new study suggests that drops of fuel spilled at gas stations—which occur frequently with fill-ups—could cumulatively be causing long-term environmental damage to soil and groundwater in residential areas in close proximity to the stations.

Few studies have considered the potential environmental impact of routine gasoline spills and instead have focused on problems associated with large-scale leaks. Researchers with the Johns Hopkins Bloomberg School of Public Health, publishing online Sept. 19 in the *Journal of Contaminant Hydrology*, developed a mathematical model and conducted experiments suggesting these small spills may be a larger issue than previously thought.

"Gas station owners have worked very hard to prevent gasoline from leaking out of underground storage tanks," says study leader Markus Hilpert, PhD, a senior scientist in the Department of Environmental Health Sciences in the Johns Hopkins Bloomberg School of Public Health. "But our research shows we should also be paying attention to the small spills that routinely occur when you refill your vehicle's tank."

Over the lifespan of a gas station, Hilpert says, concrete pads underneath the pumps can accumulate significant amounts of gasoline, which can eventually penetrate the concrete and escape into underlying soil and groundwater, potentially impacting the health of those who use wells as a water source. Conservatively, the researchers estimate, roughly 1.500 liters of gasoline are spilled at a typical gas station each decade.

"Even if only a small percentage reaches the ground, this could be problematic because gasoline contains harmful chemicals including benzene, a known human carcinogen," Hilpert says.

Hilpert and Patrick N. Breysse, PhD, a professor in the Department of Environmental Health Sciences, developed a mathematical model to measure the amount of gasoline that permeates through the concrete of the gas-dispensing stations and the amount of gasoline that vaporizes into the air.

The model demonstrates that spilled gasoline droplets remain on concrete surfaces for minutes or longer, and a significant fraction of spilled gasoline droplets infiltrate into the pavement, as concrete is not impervious.

"When gasoline spills onto concrete, the droplet will eventually disappear from the surface. If no stain is left behind, there has been a belief that no gasoline infiltrated the pavement, and all of it evaporated," Hilpert says. "According to our laboratory-based research and supported by our mathematical model, this assumption is incorrect. Our experiments suggest that even the smallest gasoline spills can have a lasting impact."

Since the health effects of living near gasoline stations have not been well studied, Breysse says there is an urgency to look more closely, especially since the new trend is to build larger filling stations with many more pumps. These stations continue to be located near residential areas where soil and groundwater could be affected.

"The environmental and <u>public health</u> impacts of chronic gasoline spills are poorly understood," says Breysse. "Chronic gasoline spills could well become significant public health issues since the gas station industry is currently trending away from small-scale service stations that typically dispense around 100,000 gallons per month to high-volume retailers that dispense more than 10 times this amount."

"In a perfect world, it would be ideal to avoid chronic spills," Hilpert says. "However, if these spills do occur, it is also important to prevent rainwater from flowing over the concrete pads underneath the pumps. Otherwise, storm runoff gets contaminated with benzene and other harmful chemicals and can infiltrate into adjacent soil patches or form stormwater that may end up in natural bodies of water."

**More information:** "Infiltration and Evaporation of Small Hydrocarbon Spills at Gas Stations" *Journal of Contaminant Hydrology* 

Provided by Johns Hopkins University Bloomberg School of Public Health
Citation: Small spills at gas stations could cause significant public health risks over time (2014, October 7) retrieved 18
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October 4, 2018

#### Gas stations vent far more toxic fumes than previously thought

by Columbia University's Mailman School of Public Health

Gas stations vent far more toxic fumes than previously thought
A study led by environmental health scientists at Columbia University Mailman School of Public
Health examined the release of vapors from gas station vent pipes, finding emissions were 10 times
higher than estimates used in setback regulations used to determine how close schools, playgrounds,
and parks can be situated to the facilities. Credit: Markus Hilpert/Columbia University Mailman
School of Public Health

A study led by environmental health scientists at Columbia University Mailman School of Public Health examined the release of vapors from gas station vent pipes, finding emissions were 10 times higher than estimates used in setback regulations used to determine how close schools, playgrounds, and parks can be situated to the facilities. Findings appear in the journal *Science of the Total Environment*.

Gasoline vapors contain a number of toxic chemicals, notably benzene, a carcinogen.

The researchers attached gas flow meters to venting pipes at two large gas stations in the Midwest and Northwest and took measurements over a three-week period. They report average daily evaporative losses of 7 and 3 gallons of liquid gasoline, respectively, or 1.4 pounds and 1.7 pounds per 1,000 gallons dispensed at the pump. By comparison, the California Air Pollution Control Officers Association (CAPCOA) used an estimate of 0.11 pounds per 1,000 gallons. Based on CAPCOA emission estimates, the California Air Resources Board (CARB) determined their setback regulation of 300 feet (91 meters) from large gas stations. Similar laws exist in many, but not all states and localities. In urban areas like New York City, some gas stations are located directly adjacent to apartment buildings.

The study also simulated how the fuel vapor was carried in the air to assess the potential for short- and medium-term benzene exposures, comparing their measurements to three established thresholds. The California Office of Environmental Health Hazard Assessment one-hour Reference Exposure Level (REL) for benzene—defined as a continuous hour of exposure to the chemical—was exceeded at both gas stations at distances greater than 50 meters. At the Midwest gas station, REL was exceeded on two different days at distances greater than 50 meters, and once as far as 160 meters. The Agency for Toxic Substances and Disease Registry's Minimal Risk Level (MRL) for benzene exposure over a period between two weeks and a year was exceeded within 7 or 8 meters of the two gas stations. A less stringent measure used for short-term exposures of first responders, the American Industrial Hygiene Association's Emergency Response Planning Guidelines (ERPG), was not exceeded.

"We found evidence that much more benzene is released by gas stations than previously thought. In addition, even during a relatively short study period, we saw a number of instances in which people could be exposed to the chemical at locations beyond the setback distance of 300 feet," said first author Markus Hilpert, Ph.D., associate professor of Environmental Health Sciences at the Columbia Mailman School. "Officials should reconsider their regulations based on these data with particular attention to the possibility of short spikes in emissions resulting from regular operations or improper procedures related to fuel deliveries and the use of pollution prevention technology."

In previous work, Hilpert and colleagues documented the release of gasoline as fuel is stored and transferred between tanker trucks, storage tanks, and vehicle tanks, and how these spills can contaminate the surrounding environment. Next, the researchers will explore additional short-term measures of vapor spread to determine the bounds of safe setbacks.

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Small spills at gas stations could cause significant public health risks over time

More information: Markus Hilpert et al, Vent pipe emissions from storage tanks at gas stations: Implications for setback distances, Science of The Total Environment (2018). DOI: 10.1016/j.scitotenv.2018.09.303

Journal information: Science of the Total Environment

Provided by Columbia University's Mailman School of Public Health

Citation: Gas stations vent far more toxic fumes than previously thought (2018, October 4) retrieved 18 September 2019 from https://phys.org/news/2018-10-gas-stations-vent-toxic-fumes.html
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# Low-Level Benzene Exposure May Be Harmful

Toxin Linked to Changes in Blood Cell Count

By Jeanie Lerche Davis

FROM THE WEBMD ARCHIVES

Dec. 2, 2004 -- Gasoline, auto emissions, cigarette smoke: All contain benzene, a toxin whose chronic exposure, even at relatively low doses, has been linked to <u>leukemia</u>. Now, research shows that airborne exposure even below U.S. occupational limits can lower levels of disease-fighting <u>blood cells</u>.

But an expert from the American Cancer Society says there is no reason to be alarmed.

The research appears in this week's issue of *Science*. It is part of a long-term study evaluating effects of benzene exposure among factory workers in China.

"For many years, people felt that these low-level exposures had no impact on human physiology, but this study shows they do," says researcher Richard B. Hayes, PhD, a senior investigator at the National <u>Cancer</u> Institute. "Of course, it raises questions about long-term effects, like <u>cancer</u>. But we did not address that in this study," he tells WebMD.

#### CONTINUE READING BELOW

His study comes on the heels of another report, published in August, that showed a link between <u>childhood leukemia</u> and benzene exposure. In that study, the high-risk exposure occurred while living next door to a gas station or auto repair shop during childhood.

"There's a pretty long history of studies of benzene, including work we've done in China, that has shown benzene to be a cause of leukemia and other <u>blood</u>problems like <u>aplastic anemia</u>," Hayes tells WebMD. However, today's study is the first to look at the low-level effects of benzene exposure over a long period of time, levels below those considered the occupational safety standard level of 1 part per million (1 ppm), he notes.

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#### **Benzene and Chinese Factory Workers**

In their study, researchers compared 250 benzene-exposed shoe factory workers with 140 unexposed clothes factory workers, all living in the same region near Tianjin, China. All had worked in the factories about six years. Researchers monitored their benzene exposure repeatedly for 16 months before testing each volunteer's blood and urine.

All types of white blood cells, which are disease-fighting cells, were significantly decreased in workers exposed to less than 1 part per million of benzene, he reports, as were blood particles called platelets that help clot blood.

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# Low-Level Benzene Exposure May Be Harmful

Toxin Linked to Changes in Blood Cell Count FROM THE WEBMD ARCHIVES

Workers with longer work history - and therefore longer exposure -- had even lower white blood cell counts, he notes.

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"These changes are not dangerous in and of themselves," Hayes tells WebMD. "But they do show that even at levels below 1 ppm, benzene affects the development of white blood cells. That alone we think is an important finding."

Researchers also looked at toxic effects on progenitor cells, a type of adult stem cell that are still developing specific functions. Hayes and his team observed "even greater decreases" in these still-developing cells. "This suggests that early progenitor cells are more sensitive than are mature cells to the toxic effects of benzene," says the report. Other studies have found a similar vulnerability among immature cells.

"It doesn't mean that change will lead necessarily to <u>cancer</u>," Hayes tells WebMD. "The fact that cell numbers are reduced by 10% to 20% doesn't mean that immune function is affected. This study doesn't deal with that. This shows that something is awry, but in and of itself it doesn't indicate that any damage has been done. This is a signal we need to be paying more attention to these low-level exposures."

CONTINUE READING BELOW

#### Low-Level Benzene No Reason for Alarm

"There's no reason for alarm," Herman Kattlove, MD, medical editor with the American Cancer Society, tells WebMD.

"It's interesting that at very low levels, this does affect blood cell counts," says Kattlove. "Also, cigarette smoke has benzene, and we do know <u>smoking</u> is risk factor for acute myelogenous leukemia. So maybe there's a connection."

Everyone pumps gasoline, everyone gets exposed to automobile emissions, and some people do smoke, he says. "But there's been no increase in leukemia incidence, so we're not talking about a public health problem. We are talking about something that's best to avoid."

Don't smoke. Avoid auto pollution. "And hold your breath while you pump gas," says Kattlove.

WebMD Health News

#### Sources

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A common thread in theses articles about Benzene and cancer is the primary source of exposure... Cigarette smoke and Gas fumes.

I used to smoke, but quit when the health risks become clearer. I was about 35 years old. I had four friends that kept up their smoking habit. I've been to all four funerals.

In spite of attempts by the tobacco industry to minimize these health risks, there has been an ongoing campaign to limit our risks from tobacco smoke.

We can't smoke in most public places. Children can't buy cigarettes. We know that even second hand smoke can be dangerous.

So what should be done about benzene that comes from gas stations? One is that gas stations should not be within 300 feet of where children play or reside. That is an arbitrary number and some studies show benzene exposure much farther than 300 ft.

Another would be not to work at a gas station.

One should be careful when fueling. Think about that. If I should be careful when getting gas maybe once per week for 5 or ten minutes, what is my exposure like being near a gas station 24/7?

Lastly, I should not buy a home near a gas station. Especially if I have small children.

So I don't smoke anymore. And I don't live in close proximity to a gas station. Until now.

We need gas for our cars. Gas stations are a necessary evil. But we can use judgement about where to position them relative to children and housing.

Please consider the facts in these attached articles before your vote on Monday. Until I began researching gas station pollution I had no idea how much is known about the danger of benzene exposure to our health. Benzene is in the air and much of it comes from car exhaust. There's not a lot we can do about that immediately.

But you have the power to decide where we build these gas stations.

Thanks you for your consideration.

A study led by environmental health scientists at Columbia University Mailman School of Public Health examined the release of vapors from gas station vent pipes, finding emissions were 10 times higher than estimates used in setback regulations used to determine how close schools, playgrounds, and parks can be situated to the facilities. Findings appear in the journal *Science of the Total Environment*.

Gasoline vapors contain a number of toxic chemicals, notably benzene, a carcinogen.

The researchers attached gas flow meters to venting pipes at two large gas stations in the Midwest and Northwest and took measurements over a three-week period. They report average daily evaporative losses of 7 and 3 gallons of liquid gasoline, respectively, or 1.4 pounds and 1.7 pounds per 1,000 gallons dispensed at the pump. By comparison, the California Air Pollution Control Officers Association (CAPCOA) used an estimate of 0.11 pounds per 1,000 gallons. Based on CAPCOA emission estimates, the California Air Resources Board (CARB) determined their setback regulation of 300 feet (91 meters) from large gas stations. Similar laws exist in many, but not all states and localities. In urban areas like New York City, some gas stations are located directly adjacent to apartment buildings.

The study also simulated how the fuel vapor was carried in the air to assess the potential for short- and medium-term benzene exposures, comparing their measurements to three established thresholds. The California Office of Environmental Health Hazard Assessment one-hour Reference Exposure Level (REL) for benzene -- defined as a continuous hour of exposure to the chemical -- was exceeded at both gas stations at distances greater than 50 meters. At the Midwest gas station, REL was exceeded on two different days at distances greater than 50 meters, and once as far as 160 meters. The Agency for Toxic Substances and Disease Registry's Minimal Risk Level (MRL) for benzene exposure over a period between two weeks and a year was exceeded within 7 or 8 meters of the two gas stations. A less stringent measure used for short-term exposures of first responders, the American Industrial Hygiene Association's Emergency Response Planning Guidelines (ERPG), was not exceeded.

"We found evidence that much more benzene is released by gas stations than previously thought. In addition, even during a relatively short study period, we saw a number of instances in which people could be exposed to the chemical at locations beyond the setback distance of 300 feet," said first author Markus Hilpert, PhD, associate professor of Environmental Health Sciences at the Columbia Mailman School. "Officials should reconsider their regulations based on these data with particular attention to the possibility of short spikes in emissions resulting from regular operations or improper procedures related to fuel deliveries and the use of pollution prevention technology."

In previous work, Hilpert and colleagues documented the release of gasoline as fuel is stored and transferred between tanker trucks, storage tanks, and vehicle tanks, and how these spills can contaminate the surrounding environment. Next, the researchers will explore additional short-term measures of vapor spread to determine the bounds of safe setbacks.

Co-authors of the new study include Ana Maria Rule at Johns Hopkins, Bernat Adria-Mora formerly at Columbia, and Tedmund Tiberi at ARID Technologies, Inc. In a competing interest statement, the authors note that Tiberi directs a company that develops technologies for reducing fuel emissions from gasoline-handling operations. The research is supported by a grant from the National Institutes of Health (ES009089).

#### **Story Source:**

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#### Journal Reference:

Markus Hilpert, Ana Maria Rule, Bernat Adria-Mora, Tedmund Tiberi. Vent pipe emissions from storage tanks at gas stations: Implications for setback distances. Science of The Total Environment, 2019; 650: 2239 DOI: 10.1016/j.scitotenv.2018.09.303

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#### **CANCER CAUSES AND PREVENTION**

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### Benzene



Outdoor air contains low levels of benzene from gasoline fumes, secondhand smoke, and other sources.

#### What is benzene?

Benzene is a colorless or light-yellow liquid chemical at room temperature. It is used primarily as a solvent in the chemical and pharmaceutical industries, as a starting material and an intermediate in the synthesis of numerous chemicals, and in gasoline. Benzene is produced by both natural and man-made processes. It is a natural component of crude oil, which is the main source of benzene produced today. Other natural sources include gas emissions from volcanoes and forest fires.

#### How are people exposed to benzene?

People are exposed to benzene primarily by breathing air that contains the chemical. Workers in industries that produce or use benzene may be exposed to the highest levels of the chemical, although federal and state regulations have reduced these exposures in recent decades. Similarly, limits on the amount of benzene allowed in gasoline have contributed to reduced exposures.

Mainstream cigarette smoke is another source of benzene exposure, accounting for about half of the total U.S. population exposure to this chemical. Among smokers, 90 percent of benzene exposures come from smoking. Benzene may also be found in glues, adhesives, cleaning products, and paint strippers. Outdoor air contains low levels of benzene from secondhand tobacco smoke, gasoline fumes, motor vehicle exhaust, and industrial emissions.

#### Which cancers are associated with exposure to benzene?

Exposure to benzene increases the risk of developing <u>leukemia</u> and other blood disorders.

#### How can exposure be reduced?

Don't smoke and avoid exposure to secondhand tobacco smoke. Try to limit exposure to gasoline fumes. For workers who may be exposed to benzene on the job, the U.S. Centers for Disease Control and Prevention has <u>information</u> about how you can protect yourself and what to do if you are exposed.

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# Is It Safe to Live Near a Gas Station?

The health concerns for you or your family with living by the pump

April 14, 2009

Dear EarthTalk: I am looking at possibly buying a house that is very close to a gasoline station. Is it safe to live so close to a gas station? What concerns should I have? I have toddler and infant babies.

-- Ranjeeta, Houston, TX

Despite all the modern health and safety guidelines they must follow, gas stations can still pose significant hazards to neighbors, especially children. Some of the perils include ground-level ozone caused in part by gasoline fumes, groundwater hazards from petroleum products leaking into the ground, and exposure hazards from other chemicals that might be used at the station if it's also a repair shop.

Ozone pollution is caused by a mixture of volatile organic compounds, some of which are found in gasoline vapors, and others, like carbon monoxide, that come from car exhaust. Most gas pumps today must have government-regulated vapor-recovery boots on their nozzles, which limit the release of gas vapors while you're refueling your car. A similar system is used by the station when a tanker arrives to refill the underground tanks. But if those boots aren't working properly, the nearly odorless hydrocarbon fumes, which contain harmful chemicals like benzene, can be released into the air.

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Higher ozone levels can lead to respiratory problems and asthma, while benzene is a known cancer-causing chemical, according to the National Institutes of Health (NIH). The quest to reduce ozone levels has led the state of California to implement a more stringent vapor-recovery law, effective April

1, 2009, which requires that all gasoline pumps have a new, more effective vapor-recovery nozzle.

Underground gasoline storage tanks can also be a problem. The U.S. Environmental Protection Agency (EPA) estimates that there are some 660,000 of them from coast-to-coast. Many a lawsuit has been filed against oil firms in communities across the country by people whose soil and groundwater were fouled by a gas station's leaking underground storage tank. In the past, most tanks were made of uncoated steel, which will rust over time. Also, pipes leading to the tanks can be accidentally ruptured.

When thousands of gallons of gasoline enter the soil, chemicals travel to groundwater, which the EPA says is the source of drinking water for nearly half the U.S. If buying a home, consider its potential loss in value if a nearby underground storage tank were to leak. Gasoline additives such as methyl tertiary-butyl ether (MTBE), which has been outlawed in some states, make the water undrinkable—and that is only one of 150 chemicals in gasoline. Repeated high exposure to gasoline, whether in liquid or vapor form, can cause lung, brain and kidney damage, according to the NIH's National Library of Medicine.

Spilled or vaporized gasoline is not the only chemical hazard if the station is also a repair shop. Mechanics use solvents, antifreeze and lead products, and may work on vehicles that have asbestos in brakes or clutches. Auto refinishers and paint shops use even more potentially harmful chemicals.

In today's car-centric world, we can't escape exposure completely, because these chemicals are in our air just about everywhere. But by choosing where we live, keeping an eye out for spills, and pressuring the oil companies to do the right thing for the communities they occupy, we can minimize our exposures.

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Ask A Toxicologist > What are the effects of exposure to benzene?

#### What are the effects of exposure to benzene?

posted on 4:38 PM, January 21, 2016

Benzene is a type of chemical called a hydrocarbon. It is a volatile organic compound that is used commonly in the manufacture of many products including plastics, rubbers, dyes, and synthetic fibers, and is also found in gasoline and cigarette smoke. Exposure to benzene occurs most commonly in workplaces such as industrial plants where it is being used, but can also occur from natural processes such as volcanoes or forest fires. Benzene can build up in water and soil, particularly in and around industrial sites. You can become exposed to benzene by inhalation, by skin contact, or by consuming food or water that is contaminated.

Exposure to liquid or vaporized benzene can be irritating to the eyes, mouth, and lungs. After breathing in a large amount of benzene, you can experience lightheadedness or sleepiness, and can even lose consciousness. Benzene exposure can also cause abnormal heart rhythms and a dangerously fast heart rate. Long-term exposure to benzene, such as in a workplace, can result in blood cancers such as leukemia, low numbers of red blood cells which are needed to carry oxygen, and low numbers of platelets, blood cells that are important in preventing excessive bleeding and infections.

Exposure to tobacco smoke and gasoline are the most common way that members of the public are exposed to benzene. The best way to avoid benzene exposure is by avoiding smoking (active and passive), and by avoiding contact with gasoline by pumping gas safely. People who live near petroleum refineries, gas stations, or certain industrial areas may be at increased risk for benzene exposure, by breathing in small amounts of benzene over time, or because of industrial spills or other accidents. Individuals who work in settings where benzene is found such as gas station

attendants, and workers in the rubber, steel and petrochemical industries are at the highest risk

for benzene toxicity. A number of governmental and non-governmental agencies work to protect both workers and the general public from benzene exposure. The Occupational Safety and Health Administration (OSHA) protects workers by limiting the amount of benzene that is allowable in the air over the course of a work week and by ensuring that at-risk workers use protective equipment such as respirators. Work environments where benzene is used are monitored by checking air samples for benzene. The Environmental Protection Agency (EPA) protects the general population by limiting and monitoring the amount of benzene in drinking water and food, and by managing industrial spills of benzene that could harm the public.

Since methods for measuring your breath, blood, urine, or tissues for benzene are only reliable for a short time and after a very large benzene exposure, if your personal or occupational doctor is concerned that you may be at risk for health effects from benzene toxicity, blood testing to check your blood counts for any abnormalities is the recommended approach. Toxicologists at state poison control centers as well as at the U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) can be of assistance in managing workplace or environmental benzene exposures that have resulted in abnormalities in consciousness, heart activity or blood counts in people who are exposed.

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### **Category**Cancer A-Z

WHAT CAUSES CANCER?

## Benzene and Cancer Risk

### What is benzene?

Benzene is a colorless, flammable liquid with a sweet odor. It evaporates quickly when exposed to air. Benzene is formed from natural processes, such as volcanoes and forest fires, but most exposure to benzene results from human activities.

Benzene is among the 20 most widely used chemicals in the United States. It is used mainly as a starting material in making other chemicals, including plastics, lubricants, rubbers, dyes, detergents, drugs, and pesticides. In the past it was also commonly used as an industrial solvent (a substance that can dissolve or extract other substances) and as a gasoline additive, but these uses have been greatly reduced in recent decades.

Benzene is also a natural part of crude oil and gasoline (and therefore motor vehicle exhaust), as well as cigarette smoke.

# How are people exposed to benzene?

The main way people are exposed is by breathing in air containing benzene. Benzene can also be absorbed through the skin during contact with a source such as gasoline, but because liquid benzene evaporates quickly, this is less common.

People can be exposed to benzene:

- At work
- · In the general environment
- Through the use of some consumer products

The highest exposures have typically been in the workplace, although these have decreased greatly over the last several decades due to federal and state regulations. Some other exposures have also gone down over time, such as the amount of benzene allowed in gasoline.

### Workplace exposures

Workers in industries that make or use benzene may be exposed to this chemical. These include the rubber industry, oil refineries, chemical plants, shoe manufacturers, and gasoline-related industries. Benzene is also used to make some types of lubricants, dyes, detergents, drugs, and pesticides. Other people who may be exposed to benzene at work include steel workers, printers, lab technicians, gas station employees, and firefighters. Federal regulations limit exposure to benzene in the workplace (see below).

#### **Community exposures**

People can be exposed to benzene in the environment from gasoline fumes, automobile exhaust, emissions from some factories, and waste water from certain industries. Benzene is commonly found in air in both urban and rural areas, but the levels are usually very low. Exposures can be higher for people in enclosed spaces with unventilated fumes from gasoline, glues, solvents, paints, and art supplies. Areas of heavy traffic, gas stations, and areas near industrial sources may also have higher air levels.

<u>Cigarette smoking</u> and <u>secondhand smoke</u> are important sources of exposure to benzene. Cigarette smoke accounts for about half of the exposure to

benzene in the United States. Benzene levels in rooms containing tobacco smoke can be many times higher than normal.

People can also be exposed to benzene in contaminated drinking water and some foods (although the levels are usually very low).

### Does benzene cause cancer?

Benzene is known to cause cancer, based on evidence from studies in both people and lab animals. The link between benzene and cancer has largely focused on <u>leukemia</u> and other cancers of blood cells.

### What do studies show?

Researchers use 2 main types of studies to try to determine if a substance causes cancer.

- Studies in people: One type of study looks at cancer rates in different groups of people. Such a study might compare the cancer rate in a group exposed to a substance to the cancer rate in a group not exposed to it, or compare it to the cancer rate in the general population. But sometimes it can be hard to know what the results of these studies mean, because many other factors might affect the results.
- Lab studies: In studies done in the lab, animals are exposed to a
  substance (often in very large doses) to see if it causes tumors or other
  health problems. Researchers might also expose normal human cells in a
  lab dish to the substance to see if it causes the types of changes that are
  seen in cancer cells. It's not always clear if the results from these types of
  studies will apply to humans, but lab studies are a good way to find out if a
  substance might possibly cause cancer.

Often neither type of study provides conclusive evidence on its own, so researchers usually look at both human and lab-based studies when trying to figure out if something causes cancer.

#### Studies in people

Rates of <u>leukemia</u>, particularly <u>acute myeloid leukemia (AML)</u>, have been found to be higher in studies of workers exposed to high levels of benzene, such as those in the chemical, shoemaking, and oil refining industries.

Some studies have also suggested links to <a href="childhood leukemia">childhood leukemia</a> (particularly AML) as well as <a href="acute lymphocytic leukemia">acute lymphocytic leukemia</a> (ALL), <a href="childhood-related cancers">chronic lymphocytic leukemia</a> (CLL), and other blood-related cancers (such as <a href="multiple">multiple</a> <a href="multiple">myeloma</a> and <a href="multiple">non-Hodgkin lymphoma</a>) in adults. However, the evidence is not as strong for these cancers.

There is much less evidence linking benzene to any other type of cancer.

#### Studies done in the lab

When inhaled or swallowed, benzene has been found to cause different types of tumors in lab animals such as rats and mice. These results support the finding of an excess risk of leukemia in humans. However, most studies in humans have not found an increased risk of cancers other than leukemia among people with higher exposures.

Benzene has been shown to cause chromosome changes in bone marrow cells in the lab. (The bone marrow is where new blood cells are made.) Such changes are commonly found in human leukemia cells.

# What expert agencies say

Several national and international agencies study substances in the environment to determine if they can cause cancer. (A substance that causes cancer or helps cancer grow is called a *carcinogen*.) The American Cancer Society looks to these organizations to evaluate the risks based on evidence from laboratory, animal, and human research studies.

Based on animal and human evidence, several expert agencies have evaluated the cancer-causing potential of benzene.

The International Agency for Research on Cancer (IARC) is part of the World Health Organization (WHO). One of its goals is to identify causes of cancer. IARC classifies benzene as "carcinogenic to humans," based on sufficient evidence that benzene causes acute myeloid leukemia (AML). IARC also notes that benzene exposure has been linked with acute lymphocytic leukemia (ALL), chronic lymphocytic leukemia (CLL), multiple myeloma, and non-Hodgkin lymphoma.

The National Toxicology Program (NTP) is formed from parts of several different US government agencies, including the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA). The NTP has classified benzene as "known to be a human carcinogen."

The US **Environmental Protection Agency (EPA)** maintains the Integrated Risk Information System (IRIS), an electronic database that contains information on human health effects from exposure to various substances in the environment. The EPA classifies benzene as a known human carcinogen.

(For more information on the classification systems used by these agencies, see *Known and Probable Human Carcinogens*.)

# Does benzene cause any other health problems?

Benzene is a potentially dangerous chemical. High levels of exposure can cause both short-term and long-term health effects.

**Short-term effects** 

Breathing in high doses of benzene can affect the nervous system, which can lead to drowsiness, dizziness, headaches, tremors, confusion, and/or unconsciousness. Consuming foods or fluids contaminated with high levels of benzene can cause vomiting, stomach irritation, dizziness, sleepiness, convulsions, and rapid heart rate. In extreme cases, inhaling or swallowing very high levels of benzene can be deadly.

Exposure to benzene liquid or vapor can irritate the skin, eyes, and throat. Skin exposure to benzene can result in redness and blisters.

#### Long-term effects

Long-term exposure to benzene mainly harms the bone marrow, the soft, inner parts of bones where new blood cells are made. This can result in:

- Anemia (a low red blood cell count), which can cause a person to feel weak and tired.
- A low white blood cell count, which can lower the body's ability to fight infections and might even be life-threatening.
- A low blood platelet count, which can lead to excess bruising and bleeding.

There is also some evidence that long-term exposure to benzene might harm reproductive organs. Some women who have breathed in high levels of benzene for many months have had irregular menstrual periods and ovary shrinkage, but it is not known for sure if benzene caused these effects. It is not known if benzene exposure affects the fetus in pregnant women or fertility in men.

# Are benzene levels regulated?

Several government agencies regulate benzene levels and exposures.

The Occupational Safety & Health Administration (OSHA) is the federal agency responsible for health and safety regulations in most workplaces.

OSHA limits exposure to benzene in the air in most workplaces to 1 ppm (part per million) during an average workday and a maximum of 5 ppm over any 15-minute period. When working at potentially higher exposure levels, OSHA requires employers to provide personal protective equipment such as respirators.

The EPA limits the percentage of benzene allowed in gasoline to an average of 0.62% by volume (with a maximum of 1.3%).

The EPA limits concentrations of benzene in drinking water to 5 ppb (parts per billion). Some states may have lower limits. Likewise, the US Food and Drug Administration (FDA) sets a limit of 5 ppb in bottled water.

The Consumer Product Safety Commission (CPSC) considers any product containing 5% or more by weight of benzene to be hazardous, requiring special labeling.

# Can I limit my exposure to benzene?

If you are concerned about benzene, there are several ways you can limit your exposure.

Stay away from cigarette smoke. If you are a smoker, <u>try to quit</u>. Cigarette smoke is a major source of benzene exposure.

Try to limit gasoline fumes by pumping gas carefully and using gas stations with vapor recovery systems that capture the fumes. Avoid skin contact with gasoline.

When possible, limiting the time you spend near idling car engines can help lower your exposure to exhaust fumes, which contain benzene (as well as other potentially harmful chemicals).

Use common sense around any chemicals that might contain benzene. Limit or avoid exposure to fumes from solvents, paints, and art supplies, especially in unventilated spaces.

If you are exposed at your workplace, talk to your employer about limiting your exposure through process changes (such as replacing the benzene with another solvent or enclosing the benzene source) or by using personal protective equipment. If needed, the Occupational Safety & Health Administration (OSHA) can provide more information or make an inspection.

# What should I do if I've been exposed to benzene?

For short-term exposure to high levels of benzene, the Centers for Disease Control and Prevention (CDC) recommends getting away from the source of benzene, removing any clothing that may have benzene on it, washing exposed areas with soap and water, and getting medical care as soon as possible.

If you think you may have been exposed to benzene over a long period of time, speak to a doctor. Benzene can be measured in the blood or breath, and breakdown products of benzene can be measured in the urine. These tests can only detect recent exposures to benzene. They cannot predict possible health effects.

- Written by
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#### The American Cancer Society medical and editorial content team

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

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