Open Citizen Comment Procedure

1) Public Hearings – Any citizen is allowed to ask questions and/or make comments during any public hearing scheduled for a particular issue.

2) “Citizen Communication” – Public comment can be provided on any item on the agenda or on issues affecting the City not on the agenda. Public comments should generally be limited to 3-5 minutes. Citizens are encouraged (but not required) to contact City Administration one week prior to the meeting, preferably in writing, to be placed on the agenda. Doing so provides Council an opportunity to give consideration to the issue/comment.

COUNCIL PRAYER
Ministerial Alliance

Rolla City Council Meeting
Tuesday, February 19, 2019
901 North Elm Street
City Hall Council Chambers
6:30 P.M.

PLEDGE OF ALLEGIANCE
Councilman Jonathan Hines

I. PUBLIC HEARINGS
A) Ordinance Rezoning Parcel Located on the Southeast Side of the Intersection of Lions Club Dr. & Highway O from Rural Residential District (R-R) to Highway Commercial District (C-3) (Intercounty Electric) – (City Planner James Shields) – First Reading

II. SPECIAL PRESENTATIONS
A) Rolla Municipal Utilities (RMU) FY 2019 First Quarter Report –
   (RMU General Manager Rodney Bourne)

III. OLD BUSINESS
A) Ordinance Renaming West End of Twelfth Street to Fitch Street –
   (City Planner James Shields) – Final Reading

IV. NEW BUSINESS
A) Ordinance Approving Final Plat of Cottonwood Dr. Addition (Cottonwood Dr. Add.) –
   (City Planner James Shields) – First Reading
B) Ordinance Approving Final Plat of Joyner Acres (Joyner) –
   (City Planner James Shields) – First Reading
C) Ordinance Vacating the Alley that Connects Rolla Street to the End of Houston Road (Houston/Rolla Alley Vacation) – (City Planner James Shields) – First Reading
D) Ordinance Amending Section 27-92 of the Code Relating to Parking on Holloway Street –
   (City Engineer Darin Pryor) – First Reading
E) Ordinance Amending Section 27-5 of the Code Relating to Right Turns –
   (City Engineer Darin Pryor) – First Reading
F) Information Regarding Integrated Management Plan –
   (Public Works Director Steve Hargis) – Information Only
G) Motion to Accept the Cost for the Improvements of the College Hills Sewer District & Consider 8-Plex Annexation Into the Shady Oaks Sewer District –
   (Public Works Director Steve Hargis) - Motion
V. **CLAIMS and/or FISCAL TRANSACTIONS**  
   A) **Motion** Awarding Bid for Firefighter Physicals – (Fire Chief Ron Smith) - **Motion**

VI. **MAYOR/CITY COUNCIL COMMENTS**  
   A) Fort Leonard Wood Airport – Contour Airlines (commercial jet services)

VII. **CITIZEN COMMUNICATION**  
   A) Open Citizen Communication

VIII. **COMMENTS FOR THE GOOD OF THE ORDER**

IX. **CLOSED SESSION**  
Pursuant to Section 610.021 RSMo. the City Council will discuss the following issues in Closed Session:  
   1) Contract Negotiation  
   2) Personnel

X. **ADJOURNMENT**
CITY OF ROLLA  
CITY COUNCIL AGENDA  

DEPARTMENT: Community Development  
ACTION REQUESTED: Public Hearing/First Reading  

SUBJECT: A request to rezone the parcel identified with the Phelps County Assessor Account Number of 12849 from the Rural Residential (Zoning) District (R-R) to the Highway Commercial (Zoning) District (C-3). (Intercounty Electric)  

MEETING DATE: 02-19-2019  

GENERAL INFORMATION:  
CASE NUMBER: ZON19-02  
SUBMISSION DATE: 01-22-2019  
LEGAL AD DATE: 01-26-2019  
300 FOOT NOTICE: 01-25-2019  

APPLICANT/AGENT: The parcel subject to the proposed ordinance (the subject parcel) is owned by John and Bessie Ponzer. However, the Intercounty Electric Cooperative Association (Intercounty) are in the process of executing a sale contract with the property owners. Doug Lane, the Director of Operations of Intercounty, is the agent.  

LOCATION: The subject parcel is located in southeast Rolla, Missouri, on the southeast side of the intersection of Lions Club Drive and Highway O (the intersection). The subject parcel is identified with the Phelps County Assessor Account Number of 7642 and the address of 821 Highway O. See Figure 1 for a general location map and Figure 2 for a site map.  

CURRENT USE/PARCEL/ZONING DETAILS: See Figure 3 for a zoning/FLUM/use map. The subject parcel is approximately 20 acres in size. The subject parcel is approximately 1240 feet deep and 715 feet wide. There are four accessory buildings and a 954 square foot single family home on the property in very poor condition. It is currently unoccupied according to the agent. All five buildings are planned to be demolished. Area requirements for the Rural Residential District (R-R), and the Highway Commercial District (C-3) are met.  

PROJECT DESCRIPTION: The applicant proposes to locate the subject parcel within the C-3 Zoning District to establish an electrical service establishment, which will be comprised of an office (where people can pay bills and administrative work can be conducted), a storage warehouse (permitted in C-3, but no district of less intensity), and an outdoor storage area for equipment (e.g. storage of poles, transformers), which is meant to exist in C-3 and zones of higher intensity. See Figure 4 for a project description from the agent and Figure 5 for a preliminary site plan.  

ANALYSIS:  
SITUATION & NEIGHBORHOOD CHARACTER: The neighborhood area (about a half of a mile in each direction of the intersection) is mostly vacant land and single-family homes, with some multi-family and institutional uses. The subject parcel is located at the major intersection of two arterials. Abutting to the south, is a 50-lot subdivision (Huntleigh Estates) platted in 2004 and developed mostly in 2004/05. The subdivision is a successful one with 45 of the 50 lots being developed with single-family houses on approximately 12,000 square foot lots. Abutting to the east is open R-R-zoned land. To the southeast, there are single-family homes on large lots. To the
immediate west, there are a few single-family homes. The three properties at the intersection are owned by the City of Rolla (all are vacant; two are zoned C-1 and one G1). The Tim Ponzer Memorial Park is located between the vacant lot on the northwest side of the intersection and over 90 acres of single-family homes. To the north of the city-owned lot on the northeast side of the intersection is a 14.6-acre lot that contains a storage and service facility for Rolla Municipal Utilities (RMU), which has existed since 1975. This facility is similar to the proposed facility.

**LAND USE COMPATIBILITY:** The 90+ acres of single-family homes to the northwest are substantially distanced and buffered from the proposed development, which eliminates any direct adverse effects them, except for possible additional traffic in the area. The degrading aesthetics of outdoor storage and the noise that could accompany the proposed storage (e.g. beeping of forklifts, engines, clanging of equipment) is not conducive to peaceful, satisfying residential activity. Therefore, the adjacent residentially zoned areas could be affected by the proposed use of the subject parcel, especially Huntleigh Estates. However, with the proper buffering, these negative effects could be mitigated. The development will be required to have 30-foot buffer-yards on the entire east and south sides (about 2000 lineal feet). Substantial amounts of plantings are required within these buffer yards. For every 100 lineal feet of buffer-yard, the following types of plantings are required: Four canopy trees, three understory trees, four evergreen trees, and 24 shrubs. In addition, the applicant plans to enclose the outdoor storage and warehouse with 6.5-foot privacy fence and to locate the office and associated parking along Lions Club Dr., all of which should reduce the impact of the development. Lastly, while it is possible for another C-3 use to locate here, buffering/screening provisions may mitigate the impact of other uses.

**INTENT OF THE COMPREHENSIVE PLAN:** The Future Land Use Map (FLUM) “provides the physical depiction of a development pattern used to guide...location decisions...in the context with the vision, goals, [et cetera]...in the Plan” (Rolla 2020, p. 70). Designation of the subject parcel and most of the neighborhood is Low Density Residential (other designations include Government/Institutional and Parks/Open Space), which is meant to accommodate “Single-family attached or detached housing...” (Rolla 2020, p. ix). The zoning of the subject parcel as C-3 is not consistent with the FLUM. However, a FLUM amendment that would designate the subject parcel as Community Commercial could reconcile this inconsistency. While one of the key community issues outlined in Rolla 2020 is the “protection of residential neighborhoods from the encroachment of incompatible uses, particularly large commercial uses” (p.23), C-3 is intended to be located on arterial roads, especially at intersections.

**TRAFFIC SAFETY:** There will be truck and regular customer/employee traffic associated with the proposed development. The truck traffic is similar to the type of traffic the RMU facility produces. No pedestrian-related traffic incidents (2009-2017) have been reported in the immediate area. However, there have been several auto accidents at the entrance of the RMU facility. The Public Works Department does not foresee any major traffic issues.

**CONTIGUOUSNESS:** C-3 contiguousness does not exist, but the C-3 district will be adjacent to C-1 districts. However, the rezone area is substantial in size, making spot zoning claims weaker.

**CONDITIONS:** To decrease the potential impact of the development, the City Council may wish to consider a condition that requires all nonresidential activity to be located at least at least 100
feet from any residential zone and that all storage facilities (indoor and outdoor) be screened with a 7-foot masonry wall or modular wall or acoustic fence (up to 50% noise reduction). In addition, our department recommends a condition that the home and accessory buildings currently located on the property be demolished or repurposed for nonresidential uses.

**PUBLIC & INTERNAL COMMENTS:** RMU provided a comment memo pertaining to water frontage fees and electrical service (See Figure 6). No protest petitions have been filed to this department. One neighbor called this department with concerns about outdoor storage along Highway O and preferred that the buildings be located along Highway O and the storage behind these buildings. The agent and eight neighbors spoke at the public hearing held at the Planning & Zoning Commission meeting held on 02/12/2019, seven of which lived on Huntleigh Drive (See Figure 7). In sum, neighbors were concerned about effect on property values, noise pollution, light pollution, crime, and the nature of the proposed development and other potential uses in C-3.

**ACTION REQUIRED:** Unanimously, the Planning & Zoning Commission recommended that the City Council deny this proposal. The reasons for denial were that the proposed use and C-3 itself is not appropriate to abut to R-1. The action required from the City Council is to conduct a public hearing on and the first reading of an ordinance to rezone said property to C-3.

ATTACHMENTS
Figure 1, ZON19-02, General Location Map
INTERCOUNTRY REZONE: General Information

- **Applicant:** Intercounty Electric Cooperative Association (Intercounty)
- **Owner:** John and Bessie Ponzer
- **Project Description:**
  - Rezone: R-R to C-3
  - Future development of the site into an office, warehouse, and outdoor storage area for equipment (e.g., poles, vehicles) for an electrical service establishment.

02/12/2019 - Rollo's Planning & Zoning Commission Meeting
Figure 3, ZON19-02, FLUM & Zoning Map
To: James Shields  
City Planner  
City Of Rolla

The preliminary plans for the property being considered for rezoning at Highway O and Lions Club Drive will include a warehouse area of approximately 100' x 200'. The proposed warehouse should house 2 Digger Trucks, 2 large bucket trucks, 4 service bucket trucks, and 4 small utility pick-up trucks. The warehouse will have 7 drive through bays to accommodate the trucks. Material storage for power line building will be housed within the warehouse. There will be an outside storage area of approximately 100' x 125' for transformers. There will be 4 pairs of pole storage racks. Approximately 15 employees will be working from the warehouse during the day as they go to and from the field.

The office area which will face Lions Club Drive will have 3 to 4 employees working inside to conduct business with our members such as payments, service applications, or questions in general. Average traffic on a daily basis will be approximately 160 times a day based on a 23 working day month.

A green buffer zone will be along the south side of the property next to the residential area, then a 20’ space between there and a 6 ½’ high privacy fence for mowing purposes. The side adjacent to Highway O will have a buffer zone of approximately 300 plus feet to a fence over the hill to the east, which is behind the old existing house. The old house and sheds will be cleaned up and the majority of the trees which are in good shape and of any size will be saved and mowed around. The rest of the area will be fenced by a 6 ½’ high chain link fence as indicated on the preliminary drawing. Access to the warehouse within the fenced in area will be through an electronic gate of Lions Club Drive. Myself or another representative of IECA will be at each of the meetings to answer any questions not addressed in this narrative.

Thank you

Doug Lane  
Director of Operations  
Intercounty Electric Cooperative
DATE: January 28, 2019
TO: James Shields, City Planner, City of Rolla
cc: Rodney Bourne, Nathan Randolph, file
FROM: Chad Davis, Operations Manager
SUBJECT: January 29, 2019 DRC Agenda

RMU has reviewed the information provided for discussion at the January 29, 2019 DRC meeting and provides the following comments:

1. Rezone parcel 10725 (Dollar General): RMU has no comments.

2. Final Plat of Cottonwood Drive Addition to consolidate parcels 10731, 10732, 10733, 10734, 10735 and part of 10725 Cottonwood Drive Addition: RMU requests a 10 foot utility easement along the south, west, and north sides. The owner may also need to provide an easement for a portion of the electric system improvements to the new facility depending upon how electric system improvements are configured. Water frontage fees of $5,334.26 are due for the lots fronting Cottonwood before these lots are developed.

3. Rezone parcel 12849 (Intercounty Electric): Prior to providing water service to the property water frontage fees due to RMU will need to be paid. Electric service to the property may also need to be reviewed in more detail with the owner / developer as RMU serves all new development in Rolla but in this case RMU may allow an alternative electric service solution if a territorial agreement is executed for such alternative service.

4. Final Plat of Joyner Acres (Joyner Acres): RMU has no comments.

5. Request to vacate the alley that connects Rolla Street to the northeastern end of Houston Road (Houston/Rolla Alley Vacation): RMU has a secondary, overhead electric for 615 Houston Road that crosses the alley being considered. This service will need to remain in place. Since the alley will be dedicated back to the adjacent property owners this service will only cross property owned by 615 Houston Road. RMU generally does not require an easement when the overhead electric service is across only the property being served therefore we will defer from requesting an easement for this line.
Don Priest, 1295 Hwy. O. Mr. Priest spoke to the concern of the extension of Inverness Lane and the effects the approval would have on neighborhood.

Lyndon Henley, 1416 Huntleigh Drive. If Intercounty decided to sell it could be anything. Their main concern is the property value. If they had known this they would not have bought here.

David Reynolds, 1511 Huntleigh Drive. He asked the Commission to give this serious consideration. It’s a nice quiet area right now and the property values will decrease and the noise will increase. Had he known about this he would not have purchased the property. C-3 would allow anything and everything to come in there.

Bryce Crowley, 1510 Huntleigh Drive. He is not within the 185’ designation, but he is in the 300’ designation. Property values will go down. Commercial properties degrade residential home values, especially within 300’. They are at the mercy of the Planning and Zoning Commission and the City Council to be able to save their money. Single family residences are continuing to be built in that area. To say that no one will ever develop this piece of property is a little short sighted because there is evidence that is happening now. RMU storage yard extends to the back side of the property. It backs up to other C-1 development. It does not back up to residential development, as it would in this instance. The entrance to Huntleigh Estates is at the top of a hill. They are probably going to have to do some sort of excavation work. He would like to know what kind of demolition or excavation is planned. He objects to any kind of rezoning even C-1. Crime rates will go up if there is a bunch of copper wiring.

Dan Foster, 1508 Huntleigh Drive. He really does not want that behind his house. It will have adverse effects.

Mary Sue Arnold, 1415 Huntleigh Drive. She prefers the buffer be wider than 20’. She asked if they can do what they want to do if it’s rezoned to C-1.

Scott Proffitt, 1503 Huntleigh Drive. He is concerned about the lighting at night. His bedroom backs up to that property. He is also concerned about what they consider a privacy fence. He can see over a 6½’ tall fence.

Melisa Dillon, 1423 Huntleigh Drive. Her property backs up to where they are wanting to put the storage unit. She wants it to go on record that her husband and she are against the rezoning. They would never have bought this house if they had known this was coming in. They do not want this is their backyard. Even with a 6½’ privacy fence she will still be able to see it from the upstairs of her house.

Doug Lane, representing Intercounty Electric. He has no idea what it will do to the property values. They will work with the neighborhood and the City to increase the buffer and decrease noise. He said he was not going to lie; there will be a little bit of noise. Typically their work day starts at 8:00 a.m. They are finished loading up the trucks by 8:30 or 9:00 a.m. They come back in the evening. The only outside storage they will be accessing would be poles and transformers. Everything else is inside. Forklifts very rarely go outside, so they will not hear the beeping. They will probably terrace the land. He has worked at Intercounty Electric for twelve years and they have nine facilities. During that time they have only had one break-in. They have security cameras and lighting. There will be lighting at night, but it can be directional and it can be dimmed after certain hours. They would not point lighting at residential areas. They chose this place because
they wanted to be in a city municipal area. They will do everything in their power to work with
the neighborhood to minimize any concerns. They are open to any suggestions. They plan on
making the buffer zone as wide as it is at the widest point all the way down. There are some thin
spots that they intend on filling in with the correct type of trees. They do not sell property. Once
they buy property they keep it. Where the rock house is, at the end, all of that will be cleaned up.
ORDINANCE NO. ______

AN ORDINANCE THAT REZONES THE PARCEL IDENTIFIED WITH THE PHELPS COUNTY ASSESSOR ACCOUNT NUMBER OF 12849 FROM THE RURAL RESIDENTIAL (ZONING) DISTRICT (R-R) TO THE HIGHWAY COMMERCIAL (ZONING) DISTRICT (C-3). (INTERCOUNTY ELECTRIC)

WHEREAS, an application for a rezoning was duly filed with the Community Development Department on January 22, 2019, that requested that the City of Rolla rezone the parcel identified with the Phelps County Assessor Account Number of 12849 from the Rural Residential (Zoning) District (R-R) to the Highway Commercial (Zoning) District (C-3); and

WHEREAS, a public notice was duly published on January 26, 2019, in the Rolla Daily News that, in accordance with state and local law, provided notice that a public hearing on said proposal would be held at Rolla City Hall, 901 North Elm Street, Rolla, Missouri, on February 19, 2019, at 6:30 P.M.; and

WHEREAS, the City of Rolla Planning and Zoning Commission met on February 12, 2019, and recommended that the City Council deny this rezoning ordinance; and

WHEREAS, the Rolla City Council, during its meeting held on February 19, 2019, conducted a public hearing on and the first reading of this rezoning ordinance; and

WHEREAS, after consideration of all the facts, opinions, and evidence offered to the City Council at the hearing by those citizens favoring the said change of zoning and by those citizens opposing said change, the City Council found the proposals would promote the public health, safety, morals, and general welfare of the City of Rolla, Missouri, and would be for the best interest of said City.

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

SECTION 1: That the Rolla Planning and Zoning Code, which is Chapter 42 of the Code of the City of Rolla, Missouri, and a code that, in accordance with the Comprehensive Plan, divides the City of Rolla into zoning districts; controls the regulation and restriction of the erection, construction, reconstruction, alteration or use of buildings, structures, or land within such districts; and controls the number, shape, and area of such zoning districts on the the Official Zoning Map, is hereby amended by amending the Official Zoning Map in a way that changes the designation of the following described property from the Rural Residential (Zoning) District (R-R) to the Highway Commercial (Zoning) District (C-3): The current configuration of the parcel identified with the Phelps County Assessor Account Number of 12849

SECTION 2: That a condition of the approval of this ordinance is that all residential and accessory structures that exist on the property be demolished or repurposed for nonresidential uses.
SECTION 3: This ordinance shall be in full force and effect from and after the date of its passage and approval. Building permits shall not be issued by the Community Development Department until the rezoning process has been completed by the City Council and the condition of approval has been met.


APPROVED:

ATTEST:

Mayor

City Clerk

APPROVED AS TO FORM:

City Counselor
An ordinance that renames the west end of 12th Street that is situated between 14th Street and the vacated section of 12th Street, which is currently part of the parcel identified by the Phelps County Assessor Account Number of 7071, to Fitch Street.

LOCATION: The street subject to this ordinance (the subject street) is located in west Rolla immediately south of the intersection of 12th Street and 14th Street. More exactly, the subject street is the isolated west end of 12th Street that is situated between 14th Street and the vacated section of 12th Street that is currently part of the parcel identified by the Phelps County Assessor Account Number of 7071. The vacated section of 12th street that is now property owned by PCRMC (Parcel 7071) was vacated in early 2018 to accommodate the construction of a parking lot for PCRMC. See Figure 2 for the location of the subject street and a version of PCRMC’s parking plan (Subject to change).

PROJECT DESCRIPTION: The purpose of the applicants’ proposal is as follows: Since streets should be continuous, there is a need to distinguish the isolated subject street from the remaining majority of 12th Street. In other words, the street name change is proposed because it is illogical to have two separated sections of street that are identically named. Another part of the applicant’s argument is that because this isolated section of 12th Street does not run west-east like the rest of the numbered streets in the area, which has a mostly gridiron street plan, it should not be a numbered street. In addition, a letter of support for the proposal submitted to the Community Development Department that details why a street name change is in order further explains the logic of the applicants’ proposal (See Figure 3 for the letter).

ANALYSIS: PLANNING PERSPECTIVE
The numbered street naming convention used in Rolla assigns numbers to streets that run west-east in a classic gridiron street system. The promotion of wayfinding is one of the key benefits of a gridiron street system. From a planning perspective, to promote wayfinding, the diagonal portion of the end of 12th Street should may should have never been named 12th Street. Rather, 12th Street
should have ended at Powell Street and that diagonal portion should have had a non-numbered street name. There are several reasons for this conclusion. Not only will someone who is walking eastward to the end of 14th Street and turning left onto 12th Street find it confusing why two numbered streets are intersecting, but will also shortly find himself or herself in a parking lot, not headed in an east direction towards downtown, which is what a section of 12th street in this neighborhood should do. In addition, as shown in Figure 2, 13th street will continue to end at Powell Street even when the most northern driveway of the PCRMC parking lot is built and because of this, this section of street to be renamed will always be isolated. Because streets that are isolated from other streets should have their own name to promote wayfinding, the subject street should have a non-numbered street name like the other diagonal streets nearby have (e.g. Joyce Avenue). Another option would be to name the subject street 14th Street. However, it is confusing to have a 3-way stop intersection with two identical street names (the street name signs would be identical at the intersection).

PROCESS
Section 77.220 of the Revised Statutes of Missouri requires the City Council to declare such name change necessary and if they find it necessary, a resolution shall be passed. Such resolution shall then be posted in a newspaper published in the city for the duration of at least one week before having the authority to rename a street by ordinance. Then, if within four weeks after such publication a majority of the resident property owners along the line of such street do not file with the City Clerk their written protest against such proposed change of name, the City Council shall have the authority to rename the street by ordinance. Resolution 1939 was approved by the City Council on December 3, 2018, and it was published in the Rolla Daily News from December 17, 2018, through December 24, 2018, and no written protest against the street name change was filed with the City Clerk.

PUBLIC & INTERNAL COMMENTS: At the DRC meeting held on 11/27/2019, the Fire Chief voiced some concerns about the street name change. One concern relates to the possibility of the street name change causing confusion for first responders (See Figure 4 for opposition letter from Fire Department). A letter of support was filed with the Community Development Department, which is attached to this report as Figure 3.

ACTION REQUIRED: The action requested from the City Council is to conduct the final reading of the proposed ordinance that would change the name of said section of 12th Street to Fitch Street and to approve or deny said ordinance.

ATTACHMENTS
Figure 1 – Ownership Map
Figure 2, Subject Street and Parking Plan

Key
- Street proposed to be changed
- Private Driveway
- Vacated Street
Mr. Shields,

I'm writing to express my support of the name change for the west-most detached portion of 12th Street. This short section of roadway was isolated from the majority of 12th Street after a portion of 12th Street was vacated to allow the construction of the hospital parking lots. 12th Street plus the other numbered streets (10th, 11th, 13th, and 14th) are parallel east of the new parking lots. This is standard for number streets and follows the typical grid pattern. However, the now isolated portion of 12th Street is acutely angled and connects the newly extended 13th Street with 14th Street. Since this isolated portion does not follow the typical or logical orientation, I agree with the proposed name change to distinguish it from the remaining majority of 12th Street.

My comments are based on a review of a Community Development Department Staff Report figure. (Please see attachment.)

Thanks,
Mike Sneed, PE
November 27, 2018

City of Rolla Community Development  
James Shields, City Planner  
Development Review Committee  
P.O. Box 979  
Rolla, MO 65402

Dear James:

The City of Rolla Fire & Rescue has reviewed the request for 12th Street between Duane Ave. and 14th Street to be renamed to Fitch Street.

The City of Rolla Fire & Rescue opposes the name change at this time.

We would request City Council delay consideration due to the area rapidly changing and final development plans are not complete by the Phelps County Regional Medical Center. With this in mind, the risk would be to change the name of the street this month and then realize at a later date that the change was inappropriate and needed to be changed again.

The risk of multiply changes to a street name could cause confusion to all public safety responders (Fire, Police, EMS) and delay an emergency response.

In the event, a name change is approved without delay, our request would be the street be renamed 14th Street. As it would be the most logical street name and address for the house located on this section of street.

Sincerely,

Ronald E. Smith  
Fire Chief
ORDINANCE NO. ____________

AN ORDINANCE THAT CHANGES THE NAME OF THE WEST END OF 12TH STREET THAT IS SITUATED BETWEEN 14TH STREET AND THE VACATED SECTION OF 12TH STREET, WHICH IS CURRENTLY PART OF THE PARCEL THAT IS IDENTIFIED BY THE PHELPS COUNTY ASSESSOR ACCOUNT NUMBER OF 7071, TO FITCH STREET.

(12TH TO FITCH STREET)

WHEREAS, Stephanie & Mark Fitch requested to rename the west end of 12th Street that is situated between 14th Street and the vacated section of 12th street that is currently part of the parcel that is identified by the Phelps County Assessor Account Number of 7071 to Fitch Street; and

WHEREAS, the City Council of Rolla met on December 3, 2018, and, through the passage of Resolution 1939, found it necessary to change the name of said section of 12th Street to Fitch Street and directed that, in accordance with Section 77.220 of the Missouri Revised Statutes, the resolution be advertised in a local newspaper for a period of at least one week; and

WHEREAS, the City of Rolla published Resolution 1939 in the Rolla Daily News from December 17, 2018, through December 24, 2018; and

WHEREAS, after a period of four weeks from the last day of the publication of Resolution 1939, which was December 24, 2018, no owners that own property along said section of said street filed a written protest against said street name change with City Clerk of the City of Rolla; and

WHEREAS, after such a duration passes after the publication of such a resolution without a written protest of a majority of property owners along the line of such street, the City Council of Rolla shall have the power by ordinance to change said street name and that, once approved, the City Clerk shall file said ordinance with the Phelps County Recorder of Deeds.

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

SECTION 1: That after consideration, the City Council approved the request to change the west end of 12th Street that is situated between 14th Street and the vacated section of 12th street, which is currently part of the parcel that is identified by the Phelps County Assessor Account Number of 7071 to Fitch Street.

SECTION 2: That this Ordinance shall be in full force and effect from and after the date of its passage and approval.


APPROVED:

__________________________________________
MAYOR, LOUIS J. MAGDITS, IV

ATTEST:

__________________________________________
CITY COUNCILOR, LANCE B. THURMAN
CITY OF ROLLA
CITY COUNCIL AGENDA

DEPARTMENT: Community Development

ACTION REQUESTED: First Reading

SUBJECT: A request to approve the Final Plat of Cottonwood Drive Addition, which is a plat that will, through the minor subdivision process, consolidate the parcels identified with the Phelps County Assessor Account Numbers of 10731, 10732, 10733, 10734, 10735, and part of 10725 into a 1.53-acre lot. (Cottonwood Dr. Add.)

MEETING DATE: 02-19-2019

GENERAL INFORMATION:
CASE NUMBER: SUB19-02
SUBMISSION DATE: 01-15-2019

APPLICANT: The lots subject to this proposal (the subject lots) are owned by the William, Robert, & Suzanne Stoltz (the applicant) and their mailing address is PO Box 1510 Rolla, Missouri 65402. Rusty Doss of The Overland Group, LLC, which is an umbrella LLC that builds and owns the buildings in which Dollar General retail stores operate, is acting as the agent for this case.

LOCATION: The subject lots are located on the northwest side of the intersection of Cottonwood Drive and South Bishop Avenue, which is also known as U.S. Route 63, in the southwestern section of Rolla, Missouri (See Figure 1 for a general location map and Figure 2 for the site map). The future address of the lot, if approved, will be 535 Cottonwood Drive.

CURRENT USE/ZONING: The subject lots are within the General Retail (Zoning) District (C-2). The lots that comprise the southern portion of this consolidation area are vacant. Parcel 10725 has three buildings on it, which were all built in 1950. There is one single-family home (2294 sq. ft.), one garage (720 sq. ft.), and one barn (900 sq. ft.). The garage is to be demolished once all proposals are approved. Section 2 of the proposed ordinance states that the building that is located on the north boundary of Lot 1 be demolished before building permits are issued.

PROJECT DESCRIPTION: The Overland Group, LLC has executed a Purchase and Sale Contract with the applicant to purchase the subject lots in order to build a Dollar General Store on the subject lots.

ANALYSIS: As a consolidation of C-2 land being processed through the minor subdivision process with no public improvements required, no development plans are required, no parkland dedication is required, and much of the subdivision regulations do not apply. The consolidated lot will meet bulk and area requirements and will have access to a public ROW. Other subdivision regulations have either not been deemed applicable or will be met. See Figure 3 for the first draft of the final plat. A revised copy of the plat should satisfy all of the comments within the comment memos submitted to the agent of this case (See Figure 4 for the Community Development Department's memo, Figure 5 for the Public Works' memo, and Figure 6 for the Rolla Municipal Utilities' memo). There will be a 10-foot utility easement along the south, west, and north sides of the consolidated lot. In addition, Section 2 of the proposed ordinance states that requires the owner...
of the consolidated lot to obtain additional utility easements, if needed, of sufficient width and access to accommodate electric service system improvements before building permits are issued.

**PUBLIC COMMENTS:** No protest petitions or public comments have been filed to this department.

**ACTION REQUIRED:** Unanimously, the Planning & Zoning Commission recommended that the City Council approve this final plat. The action required from the City Council is to conduct the first reading of an ordinance that would approve the Final Plat of Cottonwood Drive Addition.
Figure 1, SUB19-02, General Location Map
Figure 3, SUB19-02, 1st Draft of Plat Map
MEMORANDUM

TO: Rusty Doss, Agent for Case Number SUB18-02

FROM: James Shields, City Planner

DATE: January 17, 2019

SUBJECT: Review of the Final Plat of Cottonwood Drive Addition

After review of the Final Plat of Cottonwood Drive Addition, our department has the following comments that should be taken into consideration when making any revisions you decide to make to the final plat:

1. In regards to Section 42-32.3(6), Planning & Zoning Commission Approval, there must be two signature lines under the approval date: One for the Planning & Zoning Commission Chairperson, Don Brown; and one for the Community Development Director, Steve Flowers. The Mayor’s signature line and the City Clerk’s signature line for the purposes of attestation should be under a section entitled Certificate of City Council Approval (or something similar, such as acknowledgment of City Council Approval). Above the City Clerks signature the word "Attest:" should appear (See Section 42-32.3(8)).

2. Faith Barnes will be the Collector of Revenue for Phelps County on March 4, 2019. In order for me to record the plat, you will need to change the name of the Collector on the Plat to Faith Barnes.

3. In the “Subdivision Notes” on the plat, we ask that the notes about zoning be deleted and that the lines and labels on the actual drawing of the subdivision that reference zoning be removed. We are editing the zoning lines and this information is irrelevant and can cause confusion in the future.

4. Most likely, we will be asking for a condition to be put in the ordinance that approves this plat that states that no building permits will not be issued to the land subject to this subdivision until the existing building on the plat is demolished.
Memo

TO: Community Development
FROM: Everett Briggs/Public Works Staff
Cc: Ray L. Riggs, SH, DP, DJ, DF, TF, AM, File
DATE: January 23, 2019
SUBJECT: Final Plat Review of Cottonwood Drive Addition

The public works staff has completed review of the above referenced plat and except for the following finds it to be in accordance with City of Rolla, Missouri Subdivision codes. The City of Rolla Codes can be accessed online at www.rollacity.org and then click on the city ordinance button.

1) There is a sanitary sewer access fee of $2700 per hook up due.
2) The Public Works Director has agreed to accept a cash in lieu of fee for onsite storm water detention provided that the majority of the lot is graded to drain to the storm system on the western edge of the site. This fee would be calculated as follows:
   Cash in lieu of fee = 1.53 Acres x $1500/ Ac. = $2,295.00
3) A Land Development Permit (LDP) would be due on this property and would be calculated as follows:
   LDP fee = (1.53 Acres x $150/ Ac.) + $600 = $829.50
4) The out boundary of the tract as labeled meets closure requirements.
5) Permanent Reference Monuments, two on a common line in each block, need to be set as per Sec. 42-29 (4) of the City of Rolla Ordinances.
6) The symbol used to denote these permanent reference monuments needs to be added to the symbol legend.
7) The building set back lines need to be shown on the plat.
8) According to the surveyors note SN5 there is a 40 sq. ft. area at the northwest corner of the intersection of Cottonwood Drive and U.S. Hwy. 63 that does not belong to anyone. The status of this area needs to be addressed. The document no. 2000-620 utility easement from Stoltz to the city would not cover this area.
RMU has reviewed the information provided for discussion at the January 29, 2019 DRC meeting and provides the following comments:

1. **Rezone parcel 10725 (Dollar General):** RMU has no comments.

2. **Final Plat of Cottonwood Drive Addition to consolidate parcels 10731, 10732, 10733, 10734, 10735 and part of 10725 Cottonwood Drive Addition):** RMU requests a 10 foot utility easement along the south, west, and north sides. The owner may also need to provide an easement for a portion of the electric system improvement to the new facility depending upon how electric system improvements are configured. Water frontage fees of $5,334.26 are due for the lots fronting Cottonwood before these lots are developed.

3. **Rezone parcel 12849 (Intercounty Electric):** Prior to providing water service to the property water frontage fees due to RMU will need to be paid. Electric service to the property may also need to be reviewed in more detail with the owner/developer as RMU serves all new development in Rolla but in this case RMU may allow an alternative electric service solution if a territorial agreement is executed for such alternative service.

4. **Final Plat of Joyner Acres (Joyner Acres):** RMU has no comments.

5. **Request to vacate the alley that connects Rolla Street to the northeastern end of Houston Road (Houston/Rolla Alley Vacation):** RMU has a secondary, overhead electric for 615 Houston Road that crosses the alley being considered. This service will need to remain in place. Since the alley will be dedicated back to the adjacent property owners this service will only cross property owned by 615 Houston Road. RMU generally does not require an easement when the overhead electric service is across only the property being served therefore we will defer from requesting an easement for this line.
ORDINANCE NO. ______

AN ORDINANCE APPROVING THE FINAL PLAT OF COTTONWOOD DRIVE ADDITION, WHICH IS A PLAT THAT WILL, THROUGH THE MINOR SUBDIVISION PROCESS, CONSOLIDATE THE PARCELS IDENTIFIED WITH THE PHELPS COUNTY ASSESSOR ACCOUNT NUMBERS OF 10731, 10732, 10733, 10734, 10735, AND PART OF 10725 INTO A 1.53-ACRE LOT. (COTTONWOOD DR. ADD.)

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

SECTION 1: An ordinance that approves the Final Plat of Cottonwood Drive Addition, which is a plat that will, through the minor subdivision process, consolidate the parcels identified with the Phelps County Assessor Account Numbers of 10731, 10732, 10733, 10734, 10735, and part of 10725 into a 1.53-acre lot.

SECTION 2: That this ordinance shall be in full force and effect from and after the date of its passage and approval. Building permits shall not be issued by the Community Development Department until the Final Plat has been filed with the Phelps County Recorder of Deeds, the building that is located on the north boundary of Lot 1 the Final Plat of Cottonwood Drive Addition is demolished, and, if required, the owner of the consolidated lot obtains additional utility easements of sufficient width and access to accommodate electric service system improvements.


APPROVED:

_________________________
Mayor

ATTEST:

_________________________
City Clerk

APPROVED AS TO FORM:

_________________________
City Counselor

\[N. A.9.\]
DEPARTMENT: Community Development

A request to approve the Final Plat of Joyner Acres, which is currently platted as Lot 4 of the Final Plat of Moutray Acres.

MEETING DATE: 02-19-2019

APPLICANT: The lot subject to this proposal (the subject lot) is owned by Dr. Ginger D. Koller & Paul A. Joyner. The agent and surveyor for this project is Christopher Ferguson.

LOCATION: The subject lot is located north of the intersection of Thomas Drive and Traci Dawn Drive (See Figure 1 for a general location map and Figure 2 for the site map). The address of the lot is 1335 Thomas Drive.

CURRENT USE/ZONING: The subject lot is within the Rural Residential (Zoning) District (R-R) and has a single-family home located on it.

PROJECT DESCRIPTION: The subject lot was part of a lot reconfiguration in July of 2018, which was conducted through the subdivision process. The reconfiguration was part of the approval of the Final Plat of Moutray Acres. The subject lot is currently known as Lot 4 of Moutray Acres. The applicant would like to replat the subject lot as Lot 1 of Joyner Acres (See Figure 3 for the main portion of the final draft of plat), which is a description that is similar to its original description, Tract A of Joyner Estates. This will ensure a smooth conveyance of the land when or if the time comes.

ANALYSIS: As a replat of R-R zoned land being processed through the minor subdivision process with no public improvements required, no development plans are required and much of the subdivision regulations do not apply. No parkland dedication is required because the ordinance that approved Wild Horse Run No. 1, included a description of the subject lot and that ordinance approved of the subdivision providing private amenities in lieu of parkland dedication. Due to an unrecognized split of land at the time, Tract A of Joyner Estates became a flag lot. Flag lots are lots that consist of an access portion that does not contain enough frontage to be considered conforming to the lot requirements and a building portion. Flag lots may be created initially by a subdivision if, in part, the access portion is at least 40 feet wide and no deeper than 250 feet (See Sec. 42-26.6(8)). Tract A of Joyner Estates did meet the minimum requirements for a flag lot and was recognized through said plat. However, flag lots may not be further subdivided into additional lots without road construction that corrects the lack of frontage. Since this proposal does not create new lots nor does it adjust lot lines, the subdivision requirements pertaining to flag lots remain unviolated by this proposal. All other subdivision regulations have been met or have been deemed inapplicable. There were some minor revisions requested by the Community Development Department (See Figure 4) and the Public Works Department (See Figure 5).
**PUBLIC COMMENTS:** No protest petitions or public comments have been filed to this department.

**ACTION REQUIRED:** Unanimously, the Planning & Zoning Commission recommended that the City Council approve the Final Plat of Joyner Acres. The action required from the City Council is to conduct the first reading of an ordinance that would approve the Final Plat of Joyner Acres.
Figure 1, SUB19-01, General Location Map
Figure 2, SUB19-01, Site Map
MEMORANDUM

TO: Christopher Ferguson, Surveyor for Case Number SUB18-01
FROM: James Shields, City Planner
DATE: January 22, 2019
SUBJECT: Review of the Final Plat of Joyner Acres

After review of the Final Plat of Joyner Acres, our department has the following comments that should be taken into consideration when making any revisions you decide to make to the final plat:

1. In regards to Section 42-32.3(6), Planning & Zoning Commission Approval, the signature line for the Community Development Director, Steve Flowers, should not have the word “interim” in parentheses under it, as this position is no longer an interim position.

2. Faith Barnes will be the Collector of Revenue for Phelps County on March 4, 2019. In order for me to record the plat, you will need to change the name of the Collector on the Plat to Faith Barnes.

3. The “General Notes” should not indicate the zoning of Lot 1, as this note is not accurate and any indication of zoning could be contrary to the future zoning of the lot.
Memo

TO: Community Development
FROM: Everett Briggs/Public Works Staff
Cc: Christopher B. Ferguson, SH, DP, DJ, DF, TF, AM, File
DATE: January 24, 2019
SUBJECT: Final Plat Review of Joyner Acres

The public works staff has completed review of the above referenced plat and except for the following finds it to be in accordance with City of Rolla, Missouri Subdivision codes. The City of Rolla Codes can be accessed online at www.ROLLAcity.org and then click on the city ordinance button.

1) This is a re-subdivision of an existing platted subdivision and as such a Land Development Permit (LDP) would not be needed at this time. Depending on future development a LDP may be necessary at that time.
2) The fee in lieu of storm water detention facilities was paid when the Wild Horse Run Plat No.1 was platted. No additional fees are due at this time.
3) The out boundary of the tract as labeled meets closure requirements.
4) In the symbol legend there is a symbol for Permanent Reference Monuments but there are none shown on the plat.
ORDINANCE NO. ________

AN ORDINANCE APPROVING THE FINAL PLAT OF JOYNER ACRES, WHICH IS CURRENTLY PLATTED AS LOT 4 OF THE FINAL PLAT OF MOUTRAY ACRES.

(JOYNER ACRES)

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

SECTION 1: An ordinance that approves the Final Plat of Joyner Acres, which is currently platted as Lot 4 of the Final Plat of Moutray Acres.

SECTION 2: That this ordinance shall be in full force and effect from and after the date of its passage and approval. Building permits shall not be issued by the Community Development Department until the Final Plat has been filed with the Phelps County Recorder of Deeds.


APPROVED:

__________________________
Mayor

ATTEST:

__________________________
City Clerk

APPROVED AS TO FORM:

__________________________
City Counselor
CITY OF ROLLA
CITY COUNCIL AGENDA

DEPARTMENT: Community Development  ACTION REQUESTED: First Reading

SUBJECT: A request for the City of Rolla to vacate the entire alley that connects Rolla Street to the northeastern end of Houston Road.

(Houston/Rolla Alley Vacation)

MEETING DATE: 02-19-2019

GENERAL INFORMATION:
CASE NUMBER: VAC19-01  SUBMISSION DATE: 01-02-2019

APPLICANT: Four separate property owners own property along the approximately 16.5 foot-wide and 260-foot stretch of alley to be vacated (the subject alley): Kenneth & Dana Duncan, Mark & Angela Janos, Frueh Investments2 LLC, and Phillip and Roger Rosenburg. See Figure 1 for a general location map and Figure 2 for an ownership map. The City of Rolla (the City) is the applicant of this proposal.

LOCATION: The subject alley is located in west-central Rolla between Rolla Street and the northeastern end of Houston Road.

PROJECT DESCRIPTION: See Figure 3 (a letter sent to the four property owners listed above) and Figure 4 (Development Review Committee meeting unapproved minutes) for a more complete description of the proposal. In sum, the City recommends vacating this alley to facilitate conveyance of property and because there is no evidence that the alley was properly dedicated to the City and because the never been understood as an official City alley.

ANALYSIS:
CODE: According to Section 42-62.2(19) (Streets, Street Vacations), the following provision is stated: The Commission shall not recommend the vacation of any street or part thereof of a dedicated street if such vacation will interfere with access to the public street of any abutting property or with the uniformity or improvement of the existing street system. All parcels along the line of this alley will have access to a street once vacated if each property obtains half of the alley.

PLANNING PERSPECTIVE
Alleys provide several benefits to a city. Because of this, their vacation should be considered carefully. However, in this case, the alley fronts one lot and is on the side of two other lots, which is inappropriate and contrary to many of the benefits that alleys provide due to the fact alleys are intended to abut the back of lots. In addition, the alley was not properly dedicated. This would cause issues pertaining to its development.

PROCESS
The Rolla Planning & Zoning Code does not address street and alley vacations. However, by convention, the City sends out a letter to the property owners along the line of such a street or alley that is to be vacated, brings the proposal to the Planning & Zoning Commission, and approves of
the vacation through an ordinance that is considered by the City Council. The abutting property owners have been notified by the Public Works Department.

PUBLIC & INTERNAL COMMENTS: The discussion that was had at the Development Review Committee meeting are in Figure 4. No public comments have been received.

ACTION REQUIRED: Unanimously, the Planning & Zoning Commission recommended that the City Council approve the ordinance that will vacate the entire alley that connects Rolla Street to the northeastern end of Houston Road. The action required from the City Council is to conduct the first reading of an ordinance that would approve said alley vacation.
Figure 1, VAC19-01, General Location Map
Figure 2, VAC19-01, Ownership Map
January 2, 2019

Dear Friends,

We are processing a request from the owners of 615 – 613 Houston Road to formally vacate a 16.5 foot wide alley running east-west from Houston Road to Rolla Street. A drawing depicting this alley is attached.

The plan to process this request to vacate the alley through City Staff and Administration is:

- Review the request at the Development Review Committee on January 29th, 2019 at 1:30 p.m. in the Council Chambers at City Hall at 901 North Elm Street.
- Review the request and seek a recommendation from the Planning and Zoning Commission on February 12th, 2019 at 5:30 p.m. in the Council Chambers at City Hall at 901 North Elm Street.
- Review the request and seek approval from City Council to vacate the alley at the February 19th, 2019 council meeting in the council chambers at 6:30 p.m.

This alley dates back to the late 1890’s and from the information we can find was never dedicated to the City of Rolla for public use. The City has never maintained this alley. The vacation of the alley will relinquish any City of Rolla claim to this tract of land.

If you should have any questions, please feel free to contact us. You may also, of course, attend any of the meetings listed above and express your comments, questions or concerns.

Sincerely,

Steve Hargis, P.E.
Public Works Director

SH/jmc

Enc.

An Equal Opportunity Employer
A request for the City of Rolla to vacate the entire alley that connects Rolla Street to the northeastern end of Houston Road.

(Houston/Rolla Alley Vacation)

Mr. Hargis said he is not sure the City even has an alley there. The alley was called out of a transfer of land back in the 1800’s. He is not aware of any dedication of the alley. The property is getting ready to change hands. The attorneys would like to see this happen to make everyone happy. The alley separates them from Houston Rd. He does not have any problem with it. Mr. Pryor added they do not think the City has any right to it. Mr. Hargis said it is not developed all the way through. It is a driveway that goes back into 615 and 613 with no connection. David Forshee said they looked at all the deeds and it was excluded from anyone’s deeds. There was never any dedication to the City. It has never been an official public alley. Steve Flowers asked if the alley will be transferred to both owners. Mr. Hargis said yes, they will have equal halves. The City will do an Ordinance vacating the alley. By vacating it all they are doing is saying the City has no interest in it. Chad Davis said RMU will not require an easement.
ORDINANCE NO. ______

AN ORDINANCE APPROVING THE VACATION OF THE ENTIRE ALLEY THAT CONNECTS ROLLA STREET TO THE NORTHEASTERN END OF HOUSTON ROAD. (HOUSTON/ROLLA ALLEY VACATION)

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

SECTION 1: That the entire alley that connects Rolla Street to the northeastern end of Houston Road be vacated.

SECTION 2: That this Ordinance shall be in full force and effect after its passage and approval.


APPROVED:

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Counselor
CITY OF ROLLA
CITY COUNCIL AGENDA
DEPARTMENT HEAD: Darin Pryor, Engineer
ACTION REQUESTED: Ordinance 1st Reading
ITEM/SUBJECT: No Parking Ordinance Holloway Street

BUDGET APPROPRIATION (IF APPLICABLE) $ DATE: 02/19/19

******************************

COMMENTARY:

Staff is proposing to remove the on street parking on Holloway Street on the west side from Fourteenth Street to Eighteenth Street. After the installation of the sidewalk on the west side of Holloway Street in this area the width of the street will make it difficult to allow on street parking.

Staff is requesting the first reading of an ordinance making the above change.
ORDINANCE NO. __________

AN ORDINANCE AMENDING SECTION 27-92 OF THE GENERAL ORDINANCES OF THE CITY OF ROLLA, MISSOURI KNOWN AS THE CODE OF THE CITY OF ROLLA, MISSOURI, RELATING TO PARKING.

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

Section 1: That Section 27-92 of the Code of the City of Rolla, Missouri, pertaining to parking is hereby amended by adding the following:

Sec. 27-92 Parking Prohibited – On certain streets or parts of streets.

It shall be unlawful for any person to cause or permit any motor vehicle registered in his/her name to be unlawfully parked as set out in this section.

Holloway Street, on the west side, from Fourteenth Street to Eighteenth Street.


APPROVED:

______________________________
MAYOR

ATTEST:

______________________________
CITY CLERK

APPROVED AS TO FORM:

______________________________
CITY COUNSELOR
Section 27-92 Parking Prohibited
On certain streets or parts of streets
Holloway Street on the west side, from Fourteenth Street to Eighteenth Street

Proposed No Parking Area
CITY OF ROLLA

CITY COUNCIL AGENDA

DEPARTMENT HEAD: Darin Pryor, Engineer

ACTION REQUESTED: Ordinance 1st Reading

ITEM/SUBJECT: Right Turn Only Ordinance

BUDGET APPROPRIATION (IF APPLICABLE) $  DATE: 02/19/19

***********************************************************

COMMENTARY:

Staff is proposing to remove the “Right Turn Only” restriction at the Stroback Street and South Bishop Avenue intersection. In the past we have received requests to remove the right turn only restriction and staff has requested from council to wait until the Route 72 extension was complete to review this intersection. After review, staff feels removing this restriction is warranted. This intersection will continue to be monitored for safety.

Staff is requesting the first reading of an ordinance to remove the “Right Turn Only” restriction.
ORDINANCE NO. ________

AN ORDINANCE AMENDING SECTION 27-5 OF THE GENERAL ORDINANCES OF THE CITY OF ROLLA, MISSOURI KNOWN AS THE CODE OF THE CITY OF ROLLA, MISSOURI, RELATING TO RIGHT TURNS.

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

Section 1: That the following segment of Section 27-5 of the Code of the City of Rolla, Missouri, pertaining to right turns is hereby amended by deleting the following:

Article I – In General

Sec. 27-5 Right turn only at certain intersections.

On Strobach Street at South Bishop Avenue on the west side. (Ord. 3317)


APPROVED:

______________________________
MAYOR

ATTEST:

______________________________
CITY CLERK

APPROVED AS TO FORM:

______________________________
CITY COUNSELOR
Article 1 – In General

Sec. 27-5 Right turn only at certain intersections.
Delete: On Stroghan Street at South Bishop west side.

Remove “Right Turn Only” sign and pavement markings.
HDR has completed a draft of our proposed Integrated Management Plan for municipal stormwater and wastewater for the City of Rolla. This plan was developed according to EPA guidelines.

This plan has been reviewed by DNR and they are ready to approve providing the plan is adopted by the City of Rolla.

I have included a copy of this plan for your review. A formal presentation by our consultant will be given at the March 4th meeting.

Once adopted, this will replace our Voluntary Compliance Agreement with DNR which is scheduled to expire on May 3, 2021.
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Attachments

Attachment A. City of Rolla’s Anticipated Clean Water Act Compliance Timeline.

Attachment B. IMP Cost Projection Summary.
1. Introduction

The City of Rolla, Missouri (City) is currently facing a number of infrastructure challenges and evolving state and federal water quality drivers that will impact planning decisions and drive investments over the next several decades (Attachment A). The City's situation is not unique, as aging infrastructure, increasingly complex water quality issues, and challenging economic conditions have strained municipal utility management across the country. These issues have been further complicated by federal and state regulatory structures that historically focused on enforcing individual Clean Water Act (CWA) requirements on fixed schedules, without full consideration of all obligations that a utility may be facing or whether compliance efforts will result in meaningful improvements in environmental and public health.

The purpose of this integrated plan is to identify affordable solutions and implementation schedules that address the City's infrastructure needs, improve water quality, and provide regulatory certainty over the next 15 to 20 years. Results from this planning effort will be used to inform future capital improvement projects and extend CWA compliance schedules so that user rates remain affordable over the planning period.

1.1 Integrated Planning Background

In 2011, the US Environmental Protection Agency (EPA) recognized that when afforded the opportunity to use regulatory flexibilities to balance wastewater and stormwater improvements, municipalities can appropriately prioritize and schedule work that is affordable and aligned with community priorities and meet CWA requirements. In 2012, EPA released the Integrated Municipal Stormwater and Wastewater Planning Approach Framework (Framework), which outlined the guiding principles that municipalities should follow if they wish to pursue this integrated planning approach.

The Missouri Department of Natural Resources (MDNR) also understands the value that integrated planning provides and supports municipality efforts to develop implementation schedules that align with community priorities and affordability. Since the passage of Missouri’s municipal affordability statutes (644.145 RSMo), MDNR has developed robust processes for evaluating the municipal financial capability to afford wastewater and stormwater programs and has emerged as a leading state agency in these assessments.

In their 2012 Framework, EPA recommended a number of overarching principles that municipalities should consider when developing integrated plans; MDNR’s integrated planning framework closely mirrors EPA’s Framework. According to EPA, integrated plans should:

1. Reflect State requirements and planning efforts and incorporate State input on priority setting and other key implementation issues.

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2. Provide for meeting water quality standards and other CWA obligations by utilizing existing flexibilities in the CWA and its implementing regulations, policies, and guidance.

3. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality-related challenges and non-compliance.

4. Evaluate and incorporate, where appropriate, effective sustainable technologies, approaches and practices, particularly including green infrastructure measures, in integrated plans where they would provide more sustainable solutions for municipal wet-weather control.

   “The integrated planning approach does not remove obligations to comply with the CWA [Clean Water Act], nor does it lower existing regulatory or permitting standards, but rather recognizes the flexibilities in the CWA for the appropriate sequencing and scheduling of work.”

   From EPA's 2012 Integrated Municipal Stormwater and Wastewater Planning Approach Framework

5. Evaluate and address community impacts and consider disproportionate burdens resulting from current approaches as well as proposed options.

6. Ensure that existing requirements to comply with technology-based and core requirements are not delayed.

7. Ensure that a financial strategy is in place, including appropriate fee structures.

8. Provide appropriate opportunity for meaningful stakeholder input throughout the development of the plan.

EPA and MDNR recognize that municipalities will need to develop integrated plans that are appropriately tailored to the size of the municipality and the scope and complexity of the issues they face. However, EPA suggests that all integrated plans should generally address the following six elements:

**Element 1:** A description of the water quality, human health and regulatory issues to be addressed.

**Element 2:** A description of existing wastewater and stormwater systems under consideration and summary information describing the systems’ current performance.

**Element 3:** A process which opens and maintains channels of communication with relevant community stakeholders in order to give full consideration of the views of others in the planning process and during implementation of the plan.

**Element 4:** A process for identifying, evaluating, and selecting alternatives and proposing implementation schedules.
Element 5: A process for evaluating the performance of projects identified in a plan.

Element 6: An adaptive management process for making improvements to the plan.

1.2 Rolla’s Infrastructure and Regulatory Challenges

The City recognizes that the EPA and MDNR integrated planning frameworks provide a powerful tool that can be used to efficiently and effectively satisfy CWA requirements and meet evolving regulatory obligations over time, while continuing to address issues associated with managing existing and future infrastructure investments. The City initiated the current integrated planning effort after multiple and significant regulatory challenges and infrastructure demands highlighted the importance of balancing and prioritizing investments.

In 2011, the City entered into a Voluntary Compliance Agreement with MDNR to improve wet-weather flow management strategies through development and implementation of a Bypass Elimination Plan. The Voluntary Compliance Agreement allows the City 10 years to reduce inflow and infiltration (I/I), minimize unauthorized sanitary sewer overflows (SSOs), and eliminate bypasses caused by excess flow at two (Vichy Road and Southeast) of the City’s three WWTPs. The City has made significant progress reducing I/I and SSOs in the system and intends to address wet-weather management issues at the WWTPs to fully meet their obligations by the 2021 deadline.

In addition to improving wet-weather management, the City understands that each of the three WWTPs must be upgraded over the next 20 years to replace aging components that are beyond their useful life, resolve capacity limitations to allow for future growth and development, and ensure that treatment performance is sufficient to protect and restore impaired waters in the City’s service area. The City recently completed a Facility Plan which outlined potential upgrade alternatives, costs, and schedules to meet these needs, but understand that the improvements must be balanced with respect to regulatory requirements and other wastewater and stormwater system needs to ensure that services remain affordable to residents.

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The City and MDNR recently negotiated a Memorandum of Understanding (MOU) to acknowledge that Rolla is developing an integrated management plan (IMP) for stormwater and wastewater investments using the federal and state frameworks to prioritize projects within their wastewater and stormwater systems. Results of this planning effort will allow the City to affordably schedule and implement projects to address infrastructure needs and meet CWA requirements over time. In return, MDNR has committed to use the IMP to guide future regulatory decisions and compliance schedules.

The City retained HDR, Inc., and CM Archer Group, P.C., to assist in developing the IMP. This planning effort is focused on developing a prioritized and balanced infrastructure investment strategy to address wastewater and stormwater management needs, including programmatic and capital funding for the wastewater collection, wastewater treatment, and stormwater management programs.

1.3 Rolla’s IMP Approach
The City followed EPA’s integrated planning principles and applied the six steps to develop a tailored, adaptive IMP that outlines short- and long-term wastewater and stormwater plans to address infrastructure needs and achieve CWA compliance. The IMP identifies affordable projects and improvements that address the most critical infrastructure and regulatory drivers first, while allowing adequate time to assess the public health and water quality benefits resulting from those projects. This phased approach will allow the City to gather necessary information to measure implementation progress, inform future infrastructure planning, and affordably adapt the IMP over time, if necessary. Results form the City’s planning efforts are described in the sections that follow, and are organized according to the six steps identified by EPA.
2. Establish the Vision

Element 1 of EPA’s framework involves identifying the important regulatory, environmental, human health, and infrastructure issues that will be addressed in the planning process. Early in the planning process, the City identified a set of goals and issues that should be addressed by the IMP. The City’s initial IMP goals are as follows:

- **Plan for necessary improvements at three WWTPs.** Wastewater is treated at three WWTPs across the City: the Southeast WWTP, the Vichy Road WWTP, and the Southwest WWTP. Addressing aging infrastructure to comply with regulatory requirements and responsibly plan for future growth and service demands at these three facilities is the City’s primary IMP goal in the near-term. This plan outlines both the anticipated near-term (10 years) and long-term (20 years) upgrade needs for each of the WWTPs.

- **Improve water quality in City streams while reducing regulatory uncertainty.** The City faces a number of evolving state and federal water quality drivers that impact wastewater and stormwater infrastructure planning (Attachment A). In particular, dissolved oxygen impairments for Dutro Carter Creek, Little Dry Fork Creek, and Burgher Branch are an important challenge facing the City that have the potential to lead to significant treatment upgrades in the future. In addition, the Little Beaver Creek bacteria impairment could lead to more stringent regulatory controls for the City’s stormwater program. The plan includes efforts to address impairments in an iterative approach to provide at least ten to twenty years of regulatory certainty for these regulatory drivers.

- **Maintain affordable rates.** Financial impacts on all City ratepayers must be carefully considered as IMP alternatives are developed or implemented. This plan evaluates anticipated service cost increases with respect to state and federal CWA affordability guidance to confirm that future rates remain affordable to the City’s ratepayers.

- **Address community priorities.** Integrated planning is a community-driven process. Stakeholder and community involvement is critical to developing an effective IMP because it helps the City identify and prioritize issues that are important to residents and ratepayers. It also allows the City to communicate the known infrastructure and water quality problems and how the proposed projects will address these problems and provide additional benefits.
3. Evaluate Existing System Performance

The second step of the City’s IMP process is to evaluate the performance and needs of its existing wastewater and stormwater systems. This step directly addresses Element 2 of EPA’s IMP framework and forms the basis for developing IMP alternatives (Element 4). As part of this effort, the City:

- Characterized current surface water quality conditions to identify current and potential future water quality priorities in the City;
- Summarized wastewater and stormwater system asset information to present a comprehensive view of the existing wastewater and stormwater systems; and
- Compiled existing wastewater and stormwater data to understand the effectiveness of existing processes and develop performance baselines that can be used to measure future improvements.

Guided by the IMP Vision developed in Step 1, the City used the information collected in Step 2 to prioritize asset needs, identify critical issues or high priority areas, and outline important data needs that should be collected to address these issues. A summary of the existing system performance evaluation is included below.

3.1 Surface Water Quality Conditions

The City is located in the Ozark Highlands region of Missouri on the border of two ecological drainage units (EDUs). The Ozark Highlands are characterized by diverse topographic, geologic, soil, and hydrologic conditions. A large number of springs are also located throughout the region. These conditions support a wide variety of terrestrial and aquatic organisms.

Because the City is located on a plateau between two EDUs, the watershed area that adjoins or intersects the City is large (270 square miles) and contains more than 140 miles of streams. Within the City itself however, there are only approximately eight miles of streams and two lakes. There are four prominent streams in the Rolla area (Little Beaver Creek, Burgher Branch, Little Dry Fork, and Dutro Carter Creek) that support aquatic life and recreational opportunities.

The State of Missouri has established water quality standards for streams and lakes, including those in Rolla. These standards are implemented by MDNR and specify surface water quality conditions that are considered protective of both aquatic life and public health. If MDNR finds that surface water quality standards are not met in a stream or lake, they could require that the City take corrective action if the impairment is attributed to activities within the City’s jurisdictional area. Therefore, understanding current water quality conditions in the Rolla area is critical for establishing priorities through the IMP process.

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6 An EDU is a distinct geographic area that has relatively homogeneous environmental conditions and aquatic communities. There are 17 EDUs in the state. EDUs form the basis for MDNR’s biological monitoring program. The City is located on the border of EDU 23 and 25.
Section 303(d) of the federal Clean Water Act requires each state to periodically identify waters not meeting water quality standards that protect designated beneficial uses. Designated beneficial uses associated with waters in the Rolla area include: whole body contact recreation (e.g., swimming), secondary contact recreation (e.g., fishing, wading), protection of warm water aquatic life, human health-fish consumption and livestock and wildlife watering. The most recent MDNR 303(d) list of impaired waters\(^7\) includes streams within and around the Rolla area that are impaired for either whole body contact recreation (due to high bacteria levels) or aquatic life protection (due to low dissolved oxygen). Frisco Lake is also impaired due to deposition of atmospheric mercury.

The IMP will provide solutions to address water quality standards impairments in Rolla’s streams

<table>
<thead>
<tr>
<th>Waterbody ID</th>
<th>Waterbody</th>
<th>Impaired Use</th>
<th>Pollutant</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1529</td>
<td>Little Beaver Creek</td>
<td>Whole Body Contact Recreation Category B</td>
<td>Bacteria</td>
<td>Unknown</td>
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<tr>
<td>1865</td>
<td>Burgher Branch</td>
<td>Warm-Water Habitat Aquatic Life</td>
<td>Dissolved Oxygen</td>
<td>Unknown</td>
</tr>
<tr>
<td>3569</td>
<td>Dutro Carter Creek</td>
<td>Warm-Water Habitat Aquatic Life</td>
<td>Dissolved Oxygen</td>
<td>Southeast WWTP</td>
</tr>
<tr>
<td>3570</td>
<td>Dutro Carter Creek</td>
<td>Whole Body Contact Recreation Category B</td>
<td>Bacteria</td>
<td>Unknown</td>
</tr>
<tr>
<td>1863/1864</td>
<td>Little Dry Fork</td>
<td>Warm-Water Habitat Aquatic Life</td>
<td>Dissolved Oxygen</td>
<td>Southeast WWTP &amp; Unknown</td>
</tr>
<tr>
<td>7280</td>
<td>Frisco Lake</td>
<td>Human Health Protection</td>
<td>Mercury</td>
<td>Atmospheric Deposition</td>
</tr>
</tbody>
</table>

A review of data from Little Beaver and Dutro Carter Creeks indicates that bacteria levels are consistently above the Missouri state water quality criterion of 206 colonies/100 milliliters (mL), which is measured as a recreational season geometric mean value. In Dutro Carter Creek, sample results have ranged from 56 colonies/100 mL to 73,000 colonies/100 mL. The geometric mean of all recreational season data is approximately 1,250 colonies/100 mL.

Contemporaneous turbidity and bacteria data collected in 2011 demonstrate that bacteria levels are positively correlated with increased turbidity. Because turbidity generally increases due to stormwater runoff, these results suggest that nonpoint sources may be the primary source of bacteria loading in Dutro Carter Creek.

Bacteria levels in Little Beaver Creek are lower than Dutro Carter Creek but the geometric mean of all recreational season data is

approximately 650 colonies/100 mL. Turbidity data from Little Beaver Creek are not available to quantitatively evaluate potential sources but a qualitative review of the data suggest that high bacteria levels are related to stormwater runoff.

DO is necessary in streams and lakes to support aquatic life. MDNR has established a DO criterion of 5.0 milligrams per liter (mg/L) as a minimum concentration for the protection of aquatic life in warm water fisheries. MDNR considers a stream impaired for DO when more than 10% of collected DO measurements fall below this water quality criterion. A review of DO data collected in Little Beaver Creek, Burgher Branch, Little Dry Fork, and Dutro Carter Creek indicates that MDNR’s 303(d) list accurately characterizes DO conditions in the City. Of the four streams, only Little Beaver Creek meets the 5.0 mg/L criterion more than 90% of the time.

As a means to restore beneficial uses, MDNR schedules and develops a Total Maximum Daily Load (TMDL) to address each impairment. The TMDL calculates the maximum pollutant load that a waterbody can assimilate while still being protective of the beneficial uses. Load allocations for the pollutant are then assigned to each point or non-point source, and an implementation plan is established to meet the TMDL targets. During the recent 303(d) assessment process, MDNR indicated that bacteria impairments in Little Beaver Creek and Dutro Carter Creek were prioritized for TMDL development in 2022; the remaining stream impairments were scheduled for the 2024-2028 timeframe.

A key benefit of EPA’s Framework is that it can be used to extend regulatory compliance schedules as integrated plans are implemented and water quality benefits are realized. With respect to potential TMDLs on Little Beaver and Dutro Carter Creeks, the City believes that the IMP will serve as an appropriate alternative restoration approach that will be more beneficial and practicable for achieving water quality standards in these streams compared to TMDL development. In early 2018, MDNR agreed and extended all Rolla TMDL schedules out to the

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2024-2028 timeframe to allow the City to finalize and implement the IMP. MDNR has also indicated that the schedules can be extended further as water quality improves in the future.

3.2 Wastewater Treatment Systems

The City has three WWTPs (Southeast WWTP, Vichy Road WWTP, Southwest WWTP) that serve approximately 20,000 Rolla residents, 8,000 Missouri University of Science and Technology students, 500 residents of nearby Doolittle, MO, 250 residents in four adjacent sewer districts, and numerous commercial and industrial users. As described previously, the WWTP improvements will be needed over the next 10 to 20 years to address capacity issues, replace aging components, and effectively meet existing and future regulatory requirements. The City recently completed a Facility Plan\(^9\) that included an in-depth evaluation of the existing condition and performance of each WWTP, as well as potential alternative improvements. A summary of the existing facilities are included in the section below. For more specific information regarding the WWTPs, including service area maps, refer to the Facility Plan. Recommended WWTP improvements from the Facility Plan are summarized in Section 6.1 of this report.

Southeast WWTP

The Southeast WWTP is located southeast of the City approximately one mile east of Highway 72. This facility is comprised of two distinctly different treatment trains, referred to as the East and West Plants, and has an average daily flow (ADF) design capacity of 4.8 million gallon per day (MGD). The Southeast WWTP has a service area of 7,267 acres and covers the majority of the area currently developed within the city limits. This area includes the downtown commercial district, industrial areas located in the northern extent of the City, and the Missouri University of Science and Technology. Outfall 001 of the Southeast WWTP discharges to Burgher Branch. The WWTP operates under discharge permit MO-0050652, which was renewed September 1, 2018.

The West Plant was constructed in a number of phases during the 1950s. It has been periodically modified since initial construction and includes preliminary, primary, and secondary treatment. The East Plant consists of preliminary treatment followed by extended aeration activated sludge. The East Plant was originally constructed in 2000 and was modified in 2012 to consolidate West and East Plant flows and add disinfection facilities. Waste sludge from both plants is stabilized in a lagoon prior to land application. As part of the Voluntary Compliance Agreement with MDNR, the City is working to reduce wet weather discharges from Outfalls 002 and 003 but elimination of these bypasses by 2021 will likely require auxiliary treatment and increased disinfection capacity to treat wet weather flow. The City is also evaluating improvements that will facilitate compliance with future ammonia and nutrient requirements and improve water quality in impaired waters downstream from the discharge.

Vichy Road WWTP

The Vichy Road WWTP is located in the northwest part of the City near Vienna Road. The Vichy Road WWTP service area is the northern extent of the city limits, due west of the intersection of

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US Highway 63 and Interstate 44. The service area is 747 acres and serves predominantly residential developments (Attachment B). Outfall 001 of the Vichy Road WWTP discharges to an unnamed tributary of Spring Creek. The WWTP operates under discharge permit MO-0047031, which was renewed November 1, 2018.

Prior to 1970, the Vichy Road WWTP consisted of an activated sludge facility. Since that time, primary treatment and a peak flow clarifier was added. In 1996 improvements were made to include new influent screening, a nitrifying trickling filter, and a secondary clarifier. The Vichy Road WWTP has a permitted ADF design capacity of 0.4 MGD. The City is working under the Voluntary Compliance Agreement to reduce wet weather discharges from Outfall 002. Similar to the Southeast WWTP, elimination of the Vichy WWTP bypass by 2021 will require high rate treatment and disinfection of peak wet weather flows. The City is also evaluating improvements that will facilitate compliance with current disinfection requirements and future ammonia and nutrient requirements.

**Southwest WWTP**
The Southwest WWTP located west of the City near Interstate Highway 44. The facility has a ADF design capacity of 1 MGD and was constructed in 2007. It operates under discharge permit MO-0047023, which was reissued November 1, 2018. The WWTP includes preliminary treatment, activated sludge biological treatment, and disinfection and discharges to Little Beaver Creek. Much of the service area is currently undeveloped; however, extensive growth associated with the proposed Rolla West development is anticipated within the project planning period. The projected Southwest WWTP service area is 4,227 acres. Space was provided on the site to expand the secondary treatment to accommodate the anticipated future growth. The City is evaluating improvements that will facilitate compliance with future ammonia and nutrient requirements and improve water quality in impaired waters downstream from the discharge.

### 3.3 Wastewater Collection System
The City wastewater collection system is divided into three discrete service areas which drain to their respective WWTPs, as described above. The City has worked diligently to develop an extensive, dedicated GIS-based information management system to manage the collection system. The Facility Plan includes a detailed description of wastewater collection system information contained in the GIS database. A brief summary of the collection system inventory and performance are included in the sections below. For more specific information regarding the wastewater system, including system maps, refer to the Facility Plan.

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*I was unable to determine the relevance of the provided image to the document.*

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*Final Plan | 11*
System Inventory
The spatial location and connectivity of all known pipes and structures are included in the GIS. The GIS database includes over 3,600 pipe assets (142 miles) that have various designations such as public, private, or related to Missouri S&T. It also includes abandoned assets and proposed assets that are not yet in service. Active public sewers account for approximately 96% (137 miles) of all pipes in the system.

Pipe attributes such as material, size, installation date, and invert elevation are available in GIS for much of the system. Pipe materials and sizes are nearly 100% complete and installation dates are available for approximately 97% of the pipes. A majority of the system is made up of polyvinyl chloride pipe (PVP, 51%) and vitrified clay pipe (VCP, 40%). The most significant data gap with respect to pipes is invert elevations. Only 5% of pipe entries in the database include invert information.

The GIS database also includes over 3,500 manholes and other structures. Approximately 99% of the structures contained in the database are manholes, while the other 1% of structures includes lift stations and lampholes. Lampholes are rarely constructed today, as they are not suitable access points for inspections, cleaning, or rehabilitation. For this reason, many utilities are replacing lampholes with manholes in their systems. According to the GIS database, there are 13 lampholes in the system.

Structure attributes such as material, depth, and installation dates are available in GIS for much of the system. Known manhole materials in the system are primarily brick and pre-cast. However, a majority (about 73%) of the manhole materials are not listed. Further, only 40% of manhole entries include depths. Filling in the missing materials would position the City to be able to make risk-based decisions for future rehabilitation (for structural repairs and I/I reduction) and replacement of manholes. Installation dates for manholes, like pipes, are nearly complete, with only about 6% of dates missing. Remaining missing manhole ages could be estimated using the age of adjacent infrastructure and subdivision platting.

<table>
<thead>
<tr>
<th>Type</th>
<th>Length (mi)</th>
<th>Length (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandoned Sewer Main</td>
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<td>1.5%</td>
</tr>
<tr>
<td>Missouri S&amp;T Sewer Main</td>
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<td>Private Force Main</td>
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<td>Private Sewer Main</td>
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<tr>
<td>Proposed Sewer Main</td>
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<td>Public Force Main</td>
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<td>Public Sewer Main</td>
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<td>Public Trunk Line</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>142.4</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Bypass Elimination Plan Progress
As described in Section 1.2, the City developed a Bypass Elimination Plan in 2012 to reduce I/I, minimize SSOs, and ultimately eliminate bypasses at the Vichy Road and Southeast WWTPs that are caused by excess flow in the system. The Bypass Elimination Plan outlines a prioritized, 10-year long schedule to conduct flow and rainfall monitoring, complete system inspections, and implement repair and rehabilitation activities. The estimated annual cost of the I/I reduction program was $620,000 (in 2012 dollars).

The City has measured significant collection system performance improvements since implementing the Bypass Elimination Plan. Since 2012, the number of SSO events has generally decreased even though annual precipitation amounts have increased. Most recently, the City only experienced two SSO events in 2017 compared to a maximum of 11 in 2014. As the City continues to reduce I/I, SSO events will continue to decrease. The number of bypass events has also been reduced from a maximum of 43 in 2013 to 30 in 2017. Planned upgrades at the WWTPs will serve to eliminate the remaining bypasses.

3.4 Stormwater Management System
The City’s stormwater conveyance system includes a variety of manmade and natural features, including curbs, gutters, storm drains, pipes, box culverts, and detention or retention basins. The City’s system currently includes approximately 60 miles of pipe and 4,600 structures. Effective management of the stormwater system is necessary for meeting important environmental and public safety goals such as improving water quality, meeting regulatory requirements, minimizing flooding impacts, and reducing property damage.

The City reviewed their stormwater system assets, as well as performance relative to regulatory goals, to characterize the current status and potential needs of their stormwater system. A summary of the evaluation is included in the sections that follow.

System Inventory
The GIS database includes over 4,600 pipe assets. These assets contain attributes such as pipe material, diameter, and installation date. More than 95% of pipe assets include both material and diameter data. Unlike the collection system however, the GIS database only...
contains age data for approximately 10% of the stormwater pipes, most of which are attributed to those pipes installed after 2010. The City should continue to document installation dates as new storm sewers are constructed. To develop a more holistic understanding of the system and potential future rehabilitation needs, the missing records could be assessed and filled in based on as-built drawings, subdivision platting, or the installation date or age of the nearest sanitary sewer assets.

As is common in most municipalities, reinforced concrete pipe (RCP) and corrugated metal pipe (CMP) represent the majority (83%) of pipe materials present in the stormwater system. Condition assessment data are not available for the City’s system but the average life span of most materials present is generally assumed to range between 50 and 75 years, although the actual design life will vary based on induced stress, installation methods, proximity to groundwater, and soil corrosiveness. Of the materials present however, CMP has the shortest average lifespan (30 years) before it is prone to rust and structural deficiencies that cause sinkholes, flooding, or pavement failures.

The City’s GIS database also includes the location of approximately 4,600 structures. These assets include inlets (72%), manholes (1%), junction boxes (7%), box culverts (3%), and other non-standard and unknown (17%) structures. Similar to the pipes, age data are only available for approximately 10% of the structures.

The City’s stormwater system also includes 31 stormwater basins that are used to store excess runoff from approximately 2,400 acres of land in and around the City. The City’s system includes both detention and retention basins; of the 31 basins included in the GIS database, 26 are listed as detention basins and five are listed as retention basins. The purpose of this retention and detention storage is to help control stormwater discharges from developments to protect downstream areas from flooding, reduce damage to receiving streams, and to assure the long-term adequacy of storm drainage systems\textsuperscript{10}. Detention basins are areas that reduce peak runoff rates by holding stormwater runoff during and shortly after a storm event. Retention basins collected and store runoff for a longer period of time and often have agricultural, recreational, or aesthetic value.

**Stormwater Management Program**

In 1999, federal water quality regulations were expanded to include permit requirements for small (population <10,000) municipal separate storm sewer systems (MS4s). These small

systems are referred to as Phase II MS4s and are regulated by MDNR. The City is permitted under a general permit (Permit No. MOR-040033), which was reissued on October 1, 201611. Federal (40 CFR 122.34) and state (10 CSR 20-6.200(5)(A)(1-6)) regulations stipulate that MS4 permits include provisions for developing, implementing, and enforcing a stormwater management program and plan (SWMP) to reduce pollutant discharges to the maximum extent practicable (MEP).

The MS4 permit stipulates that the City must revise their SWMP to reflect the most recent operating permit, if necessary, and to prepare and submit progress reports to MDNR every odd year during the life of the permit. The City is currently working to revise their SWMP to reflect the operating permit and incorporate the alternatives developed through the IMP process (see Section 6.1). The City also maintains past progress reports and other information relevant to the MS4 program on their stormwater website at www.rollstormwater.com.

The City’s ability to maintain compliance with the requirements of the MS4 permit is an important consideration for the IMP. The City’s most recent SWMP12 reflects federal (40 CFR 122.34) and state (10 CSR 20-6.200(5)(A)(1-6)) regulations which require six (6) minimum control measures (MCMs) to meet the MEP standard. The six MCMs are:

1. **Public Education and Outreach** – Permittees are required to conduct outreach activities to communicate the impacts of stormwater and provide steps that the public can take to reduce pollutants in stormwater runoff.
2. **Public Involvement and Participation** – Permittees are required to provide opportunities for citizens to participate in program development and implementation.
3. **Illicit Discharge Detection and Elimination (IDDE)** – Permittees are required to develop and implement a plan to detect and eliminate illicit discharges to the storm sewer system.
4. **Construction Stormwater Runoff Control** – Permittees are required to develop, implement and enforce an erosion and sediment control program for construction.
5. **Post-Construction Stormwater Management in New Development and Redevelopment** – Permittees are required to develop, implement and enforce a program to address discharges of post-construction stormwater runoff from new development and redevelopment areas.
6. **Pollution Prevention and Good Housekeeping for Municipal Operations** – Permittees are required to develop and implement a program with the goal of preventing or reducing pollutant runoff from municipal operations.

The City is responsible for developing, implementing, and maintaining best management practices (BMPs), as well as measurable goals, for each of the six MCMs. EPA13 defines measurable goals as “...BMP design objectives or goals that quantify the progress of program implementation and the performance of...BMPs.” EPA further “...strongly recommends that measurable goals include, where appropriate, the following three components:

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According to EPA, measurable goals that include these three components and are easy to quantify and allow the permittee and regulatory agencies to assess progress at reducing pollutants to the MEP. The City’s SWMP includes 45 current BMPs and 60 planned BMPs. Collectively, BMP progress is tracked using nearly 170 measureable goals. Progress towards meeting each of the measureable goals has been limited by budgetary and staffing constraints. As the City revises the SWMP to address the new permit and incorporate IMP recommendations, the City will develop a more focused set of BMPs and goals that improve water quality and can be successfully implemented given the available financial and staffing resources.

**As required by their MS4 permit, the City implements a variety of stormwater management practices to reduce pollutants to the maximum extent practicable**

<table>
<thead>
<tr>
<th>Minimum Control Measure</th>
<th>Number of Current BMPs</th>
<th>Number of Planned BMPs</th>
<th>Number of Measureable Goals</th>
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<tbody>
<tr>
<td>MCM 1: Public Education and Outreach</td>
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<td>15</td>
<td>42</td>
</tr>
<tr>
<td>MCM 2: Public Involvement and Participation</td>
<td>10</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>MCM 3: Illicit Discharge Detection and Elimination</td>
<td>6</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>MCM 4: Construction Stormwater Runoff Control</td>
<td>7</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>MCM 6: Pollution Prevention and Good Housekeeping for Municipal Operations</td>
<td>12</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>46</strong></td>
<td><strong>167</strong></td>
</tr>
</tbody>
</table>
4. Community Outreach

Outreach is an important part of the planning process because the community's input helps to highlight important infrastructure, environmental, and public health needs and inform development of targeted alternatives to address those needs. Element 3 of EPA’s Framework suggests that municipalities pursue the following principles when conducting integrated planning outreach activities:

- Provide appropriate opportunities that allow for meaningful input during the identification, evaluation, and alternative selection phases of the planning effort,
- Make new information available and provide opportunities for input into the development of proposed modifications of the plan, and
- Allow public involvement to assist in evaluating the opportunities and effectiveness of potential green infrastructure alternatives, if they are relevant to the plan.

The City followed these three principles as the IMP was developed and focused on communicating with three distinct stakeholder groups: community residents, the Rolla City Council (Council), and MDNR staff.

4.1 Communication with Residents

Outreach efforts with community residents focused on preparing and providing relevant information to educate the community at large and obtaining high-level input from interested stakeholders. Several communication methods were used to accomplish these goals. First, a dedicated project website was created to provide a convenient way for the public to access information. The website includes background information about the IMP, supporting documents and reports, and other relevant educational materials. The City will continue to use this website to distribute information as the IMP is implemented.

In addition to the website, the City prepared and distributed a project factsheet to introduce the IMP, share the desired outcomes, and provide opportunities for the public to get involved. The factsheet was hosted on the project website and was made available to interested residents at an open house event on March 12, 2018. More than 80 residents attended the March open house event. At the open house, the City staff and their consultants discussed the IMP objectives, anticipated wastewater and stormwater improvements, potential user rate outcomes, and implementation schedules with interested residents.

4.2 Council Briefings

In addition to conducting broader outreach with the community, the City met with Council several times throughout development of the IMP so that they were informed and could provide input into the planning process. Those meetings included the following:

- **September, 25, 2017** – The City and their consultants met with the Council during a workshop session to provide a progress update on the Voluntary Compliance

14 https://rollacity.org/pubworks/cip.shtml#imp
Agreement, describe the results of the preliminary engineering report\textsuperscript{15} that identified potential WWTP upgrade alternatives and user rate impacts, and discuss the benefits of EPA’s integrated planning process.

- **October 16, 2017** – During this Council meeting, the Council authorized an agreement to initiate the IMP.

- **March 5, 2018** – During this Council meeting, the City gave a brief updated and reported that the IMP information would be presented at the March 12 open house event.

- **May 7, 2018** – During this Council meeting, the City and their consultants met with the Council to present an update on the IMP and provide additional details on the anticipated Southeast and Vichy Road WWTP upgrades. Representatives from MDNR attended this meeting and publicly supported the City’s efforts to develop an IMP for the wastewater and stormwater systems. The Council also authorized an agreement for design and bid services for the WWTP upgrades at this meeting.

Upon completion of the planning process, the final IMP will be presented to the Council for their approval and direction in implementing the plan. In the context of EPA’s Framework, community outreach should be an ongoing process that is used to inform and refine IMP goals and outcomes over time. Therefore, the City expects that IMP will be periodically reviewed through by the City Council and the public at large.

### 4.3 MDNR Coordination

The City met with MDNR staff several times during the development of the IMP to gain consensus on the IMP goals and objectives, discuss regulatory issues and infrastructure improvements that would be addressed by the plan, and review the potential implementation schedule. The City also coordinated with MDNR to ensure that the conditions and effluent limits contained in the new and renewed discharge permits for each of the three WWTPs reflect the outcomes of this IMP. Going forward, the City will continue to coordinate with MDNR to provide progress updates, periodically review anticipated infrastructure needs and regulatory requirements, and ensure that IMP project schedules are reflected in any regulatory compliance schedule.

6. Evaluate Alternative Solutions and Schedules

Element 4 of EPA's Framework includes the identification, evaluation, and selection of alternatives and implementation schedules for system and water quality improvements. For Rolla, the final wastewater and stormwater alternatives were selected and prioritized to affordably meet the immediate regulatory deadlines with the Voluntary Compliance Agreement and address critical infrastructure needs first, while providing flexibility to meet future anticipated regulatory requirements. The proposed improvements are expected to provide the greatest environmental benefits at the lowest cost to the community.

As the IMP is implemented over time, the City will continue to monitor and evaluate their environmental, regulatory, and system needs and modify future implementation actions, if necessary (EPA Elements 5 and 6, see Section 7). Descriptions of the City’s planned wastewater treatment, wastewater collection, and stormwater management solutions are presented below and costs are detailed in Attachment B.

6.1 Wastewater Treatment Plant Upgrade Alternatives

In their recent Facility Plan, the City evaluated alternatives to address capacity needs and meet regulatory requirements at each of the three WWTPs over the next 20 years. Capacity needs were determined for each facility following a review of existing influent flow and analytical data, as well as detailed population, flow, and loading projections over the next 20 years. Regulatory drivers considered during development of the WWTP alternatives include both existing and anticipated requirements most likely to impact discharge permit conditions for each of the facilities over the next 20 years. It should be noted that the timing and impact of these drivers was evaluated based on the information available at the time this IMP was drafted, and is subject to change as the federal and state regulatory environments evolve over time. During future implementation phases, regulatory requirements will be reevaluated to determine if IMP modifications are necessary.

The City determined that the most impactful CWA drivers for the WWTP include the following:

- **Voluntary Compliance Agreement Requirements** – The City’s highest, near-term regulatory priority is to improve wet-weather flow management at the Vichy Road and Southeast WWTPs by 2021 in accordance with the Voluntary Compliance Agreement.

- **Impaired Streams** – There are currently six water quality standards impairments in the City’s service area (Section 3.1). Two of those impairments (DO in Dutro Carter Creek and Little Dry Fork) would directly impact the City’s Southeast WWTP. Based on their current implementation schedule, MDNR intends to develop a TMDL for those streams in 2024 if water quality does not improve in the interim period.
• **Ammonia Criteria Revisions** – In 2013, EPA finalized new water quality criteria recommendations for total ammonia nitrogen (ammonia)\(^\text{16}\). The recommendations are based on new toxicity data which demonstrate that some organisms, particularly some species of gill-breathing snails and freshwater mussels, are more sensitive to ammonia than other organisms in the national toxicity dataset used in previous criteria recommendations. The new criteria could potentially result in a 50% to 70% reduction in effluent limits at each of the three WWTPs. MDNR is currently considering the EPA ammonia recommendations and is expected to adopt them into Missouri’s regulations within the next five years. As a result, lower ammonia limits will likely be required within the next two permit cycles (10 years) at each of the WWTPs.

• **Nutrient Removal Requirements** – The timing and impact of nutrient (total nitrogen and total phosphorus) removal drivers are uncertain because statewide stream nutrient regulations have not yet been adopted. In January 2018, MDNR adopted lake nutrient criteria into the state regulations; EPA approved those criteria in December 2018. The lake criteria will not impact the City directly, but MDNR’s proposed implementation plan may set a precedent for all municipal discharges in the future. In their proposal, MDNR outlined a three-phased approach for implementing nutrient removal. The phases include monitoring, voluntary optimization of existing facilities, and then final effluent limits. The final effluent limits have not been defined but would likely be set at levels achievable through biological nutrient removal (10 mg/L total nitrogen, 1 mg/L total phosphorus). These phases would be implemented over three permit cycles (15 years).

In the Facility Plan, the City identified and evaluated seven alternatives to meet the projected capacity needs and regulatory drivers over the next 20 years. Each of the alternatives includes two phases of improvements, which were scheduled based on infrastructure need, funding availability, and the timing of anticipated regulatory drivers. A brief summary of the alternatives...

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is included below. More detailed information is available in the Facility Plan and associated Addendum17.

The WWTP Facility Plan outlines phased improvements that allow the City to meet their infrastructure and regulatory needs

<table>
<thead>
<tr>
<th>WWTP</th>
<th>Regulatory Drivers</th>
<th>Alternative</th>
<th>Phase 1 Improvements Implemented by 2021</th>
<th>Phase 2 Improvements Implemented beyond 2021†</th>
<th>Total Capital Cost†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vichy Road</td>
<td>Existing 1) Voluntary Compliance Agreement</td>
<td>1*</td>
<td>Construct New WWTP $7.96 million</td>
<td>Add Nutrient Removal $1.3 million</td>
<td>$9.3 million</td>
</tr>
<tr>
<td></td>
<td>Future 2) Ammonia 3) Nutrients</td>
<td>2</td>
<td>Pump to Southwest WWTP $7.95 million</td>
<td>...</td>
<td>$7.95 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>Future 1) Peak flow disinfection 2) Ammonia 3) Nutrients</td>
<td>1*</td>
<td>Expand Capacity to Accept Vichy Flows &amp; Add Peak Flow Disinfection $5.4 million</td>
<td>Add Nutrient Removal $1.8 million</td>
<td>$1.8 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>Add Nutrient Removal $2.5 million</td>
<td>$9.9 million</td>
</tr>
<tr>
<td>Southeast</td>
<td>Existing 1) Voluntary Compliance Agreement 2) Little Dry Fork, Dutro Carter Creek DO Impairment</td>
<td>1*</td>
<td>Add Peak Flow Disinfection &amp; Ammonia Removal $18.1 million</td>
<td>Add Nutrient Removal $10.3 million</td>
<td>$28.4 million</td>
</tr>
<tr>
<td></td>
<td>Future 3) Ammonia 4) Nutrients</td>
<td>2</td>
<td>1A – Add Peak Flow Disinfection &amp; Ammonia Removal $11.5 million</td>
<td>Add Nutrient Removal $10.0 million</td>
<td>$31.6 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1B – Expanded Capacity $10.1 million</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Recommended alternatives from the Facility Plan.
**The Facility Plan identified Phase 1 improvements for Southwest that would only be implemented if additional capacity is needed to accommodate growth. However, additional capacity is not currently needed so the improvements were not considered in the development of this IMP. If new information suggests that additional capacity is needed, these assumptions will be revisited.
†For planning purposes, the IMP currently assumes that nutrient removal will be required by 2031. However, actual compliance dates may be modified in future phases of the plan to address future regulatory changes or infrastructure needs.
‡All costs are presented in 2018 dollars.

Vichy Road WWTP Alternatives
The first alternative assumes that a new Vichy Road WWTP with 0.5 MGD capacity and peak flow disinfection facilities will be constructed on a new site contiguous with the existing site in Phase 1. Wet weather facilities include an influent splitter structure, mechanical coarse screen with a bypass channel, peak flow clarifier, chemical disinfection, and a chemical storage building. After disinfection, peak flows will be blended with plant flows prior to discharge. Dry weather facilities include influent screening, grit chamber, oxidation ditch, two secondary clarifiers, ultraviolet disinfection, RAS pump station, and a sludge lagoon. A post aeration structure will also be included to increase DO in the plant effluent. Phase 2 improvements

target phosphorus removal through chemical additions. The total estimated capital cost for this alternative is $9.3 million (in 2018 dollars).

The second Vichy Road WWTP alternative evaluated was decommissioning the existing WWTP and pumping flows to the Southwest WWTP. The estimated capital cost of this alternative is $7.95 million (in 2018 dollars). However, this alternative assumes that the Southwest WWTP is also expanded to accept the flows. As described below, the capital cost of expanding the Southwest WWTP (Alternative 2) is $8.9 million.

Alternative 1 was selected because it is the lowest cost alternative when Southwest WWTP improvement costs are also considered.

**Southwest WWTP Alternatives**

In Alternative 1, Phase 2 improvements target phosphorus removal. The new wet, dry, and phosphorus removal facilities would be similar to those described for Alternative 1 at Vichy Road WWTP. The total estimated cost for this alternative is $1.8 million (in 2018 dollars).

Alternative 2 assumes that the Southwest WWTP is expanded to accept flows from the Vichy Road WWTP. It would include an expansion of both the wet and dry weather trains. Wet weather facilities include an influent splitter structure, mechanical coarse screen with a bypass channel, peak flow splitter structure, two peak flow clarifiers and chemical storage building. The existing walker unit would be converted to a peak flow clarifier and an additional clarifier would be constructed. Sodium hypochlorite and ferric chloride would be added to disinfect peak flows. Dry weather facility expansion would include an additional oxidation ditch, secondary clarifier, upgraded ultraviolet disinfection, and an upgrade lift station. After disinfection, peak flows would be blended before discharge. In order to achieve phosphorus removal through chemical addition in Phase 2, a tertiary pump station would be needed. The total estimated capital cost for this alternative is $8.9 million (in 2018 dollars).

In the Facility Plan, Alternative 1 was selected because it is the lowest cost alternative when Vichy Road WWTP improvement costs are also considered.
Southeast WWTP Alternatives
Alternative 1 addresses near term peak flow disinfection compliance issues associated with the Voluntary Compliance Agreement and will provide for additional ammonia removal. Improvements include eliminating the West Plant, installing new oxidation ditches, and constructing a third secondary clarifier to accommodate future flows. Phase 2 improvements that target nutrient removal include the addition of anoxic basins, a tertiary pump station, tertiary filtration, and a chemical building. The total estimated capital cost for this alternative is $28.4 million (in 2018 dollars).

Alternative 2 splits Phase 1 into two sub-phases (1A and 1B) and was evaluated in order to provide a lower up front cost for peak flow disinfection and ammonia removal. Phase 1A can provide ammonia removal for an estimated 10-13 years until the existing clarifiers become overloaded (approximately 3.7 MGD), at which point Phase 1B will be constructed to increase capacity. Phase 1B increases the WWTP capacity by constructing two new oxidation ditches and an additional clarifier. As with Alternative 1, Phase 2 for this alternative includes nutrient removal. The total estimated capital cost for this alternative is $31.6 million (in 2018 dollars).

Alternative 1 was selected because it is the lowest cost alternative.

6.2 Wastewater Collection System Alternatives
As discussed in Section 3.3., the City has made significant progress in reducing ILI and related overflows in the collection system since implementing BEP activities. Because the data show that the City is improving system effectiveness, the City intends to maintain their collection system management approach and level of investment for the foreseeable future (Attachment B). This will allow the City to continue to make steady progress towards reducing overflows, improving water quality, and addressing aging infrastructure while fully funding the WWTP alternatives identified in Section 6.1. During future iterations of the IMP, collection system needs will be reevaluated to determine if additional investments are necessary. The City’s planned collection system investments are summarized below.

- Maintenance and Cleaning – Effective maintenance and cleaning is important for continuing the downward trend in overflows in the collection system. The City currently invests approximately $133,000 (in 2018 dollars) per year cleaning pipes, responding to emergency calls from the public, and conducting maintenance at the airport. The IMP assumes that this level of effort and funding will be maintained.
• **Evaluation and Repair** – System evaluation and repair activities are critical to reducing I/I and improving the efficiency and effectiveness of the collection system. Evaluation activities include prioritized inspection of sewer mains and manholes, smoke and dye testing, stream crossing inspections, and private I/I reduction efforts. On average, the City invests approximately $750,000 (in 2018 dollars) per year on these activities. The IMP assumes that this level of effort and funding will be maintained.

• **Renewal** – Renewal activities are necessary for extending the useful life of aging and deteriorating infrastructure. They also help to reduce I/I entering the system from public sources, minimize expensive failures and emergency repairs that pose a risk and are disruptive to the community, and mitigate potential exfiltration through broken pipes that adversely impact stream water quality. On average, the City invests approximately $200,000 (in 2018 dollars) per year on lining and renewal activities. The IMP assumes that this level of effort and funding will be maintained.

• **Capacity Enhancements** – Capacity enhancements (installing larger diameter pipes) are occasionally necessary to address community growth or improve the ability to convey wet-weather flows. Although it is highly dependent on the source and location, capacity enhancements can also be more cost-effective than volume reduction activities related to private I/I control. On average, the City invests approximately $50,000 (in 2018 dollars) per year on capital improvements related to increasing capacity. The IMP assumes that this level of effort and funding will be maintained.

• **Pump Stations** – As pump stations age, mechanical, electrical, process, and structural repairs are required. This can involve both specific equipment replacement, improvements required for code compliance, and complete rehabilitation of aging facilities. On average, the City invests approximately $25,000 (in 2018 dollars) per year addressing pump station issues. The IMP assumes that this level of effort and funding will be maintained.

### 6.3 Stormwater Management System Alternatives

Stormwater management in the City currently includes limited repair and replacement activities, managing the MS4 program, and maintaining detention basins. Similar to the wastewater collection system, the City intends to maintain their current level of investment (approximately $400,000 annually, in 2018 dollars) in the stormwater management system for the foreseeable future (Attachment B). Approximately 50% of the existing budget is committed to through 2025 for servicing existing debt on City-owned detention and retention basins that were designed to provide flood control. However, the City intends to reallocate the remaining stormwater budget to address the most critical needs first. As discussed in Section 3.4, the City's two most significant stormwater needs include addressing aging CMP and streamlining the existing SWMP to more efficiently and effectively address MS4 permit requirements. The City's planned stormwater investments to address these needs are discussed below.
- **Repair and Replacement** – Over the IMP planning period, the City anticipates spending approximately $4.4 million (in 2018 dollars) to replace nearly 18 of the 20 miles of CMP in the system. These replacement activities will be conducted in conjunction with planned roadway activities. For planning purposes, the IMP assumes that funding will average $100,000 annually through 2025 and will increase to $300,000 annually in 2026.

- **MS4 Program** – The City currently spends approximately $100,000 (in 2018 dollars) per year administering their MS4 program. The City intends to maintain the current level of funding throughout the IMP planning period. However, the City is revising and streamlining the current SWMP to more efficiently make water quality improvements. Most notably, the City is transitioning from a City-wide management approach to one that is watershed-based. The City has identified five major watersheds that incorporate the MS4 area and intends to implement BMPs in those watersheds on a rotating basis. This approach will allow the City to tailor their management activities to address specific water quality impairments within each basin.

- **Detention Basins** – As mentioned above, the City is currently committed to spending approximately $200,000 (in 2018 dollars) per year through 2025 servicing existing debt on City-owned detention and retention basins that were designed to provide flood control. After 2025, the City intends to investigate potential retrofits for those basins to also provide water quality benefits. For planning purposes, the IMP assumes that the City will spend $50,000 per year on these retrofits. However, these costs will be reevaluated as additional information is developed.

### 6.4 Implementation Costs

The City's projected IMP investments will allow them to address immediate infrastructure and regulatory needs at their WWTPs while continuing to implement their current wastewater collection system and stormwater management systems at existing funding levels. This
approach is consistent with EPA's Framework because the City is addressing the most critical issues first, while making steady progress towards meeting all CWA requirements over time.

20-Year IMP Cost
The total projected 20-year cost of the IMP is approximately $94 million (in 2018 dollars, Attachment B). Investments in the WWTPs are the largest planned expenditures over that time and make up approximately 66% of the total cost. Those WWTP investments include full implementation of Alternative 1 at both the Vichy Road and Southeast WWTP, and implementation of Alternative 1, Phase 2 at the Southwest WWTP. Phase 1 WWTP projects will be implemented in the year 2021. For planning purposes, Phase 2 WWTP projects are currently forecasted for implementation in the year 2032 when the City will have sufficient debt capacity to take on additional projects. However, the Phase 2 improvements could be reprioritized in future iterations of the IMP if new or different infrastructure or regulatory needs are identified.

The wastewater collection and stormwater management system investments make up the remaining 25% and 9%, respectively, of the total planned 20-year cost. The collection system costs assume a continued annual funding level of approximately $1.2 million to address maintenance, cleaning, inspections, rehabilitation, renewal, capacity enhancements, and pump station maintenance. The stormwater funding will primarily go towards replacing CMP throughout the system, revising the SWMP to more fully comply with MS4 permit requirements, and servicing existing debt. During the second half of the 20-year planning period, the City will investigate the potential for water quality improvements through detention basin retrofits.
IMP Funding and User Rate Evaluation
The City intends to finance the Phase 1 WWTP improvements through the MDNR State Revolving Fund (SRF). The proposed schedule includes the Revenue Bond which was approved by 82% of voters in November 2018 and assumes a SRF loan closing in the fall of 2019. In preparation for the debt service requirements, the City Council has implemented a revision of their sewer user charge. The new structure includes the establishment of a Service Availability Fee (SAF), which is intended to cover the fixed cost associated with operating the sewer collection system. In addition to the SAF, a volumetric rate will cover the treatment cost per 1,000 gallons of usage. The SAF is based on the user's water meter size. For a typical single family residential user, the SAF started in January 2018 at $3.00 per month. By ordinance, the SAF will increase incrementally annually to $12.00 per month in January 2021. The current rate ordinance projects the volumetric charge to remain at $5.25 per 1,000 gallons through 2021. The monthly sewer bill for a typical single family residential user (assuming 5,000 gallons per month usage) will increase annually from $29.25 per month in 2018 to $38.25 per month in 2021.

Based on current projections, revenues from the above described rate structure will be sufficient to service the SRF loan and fund operations, maintenance and replacement for wastewater system. The proposed rate structure will be gradually implemented over the next four years such that the rate will be sufficient to cover full debt service upon construction completion in 2021. It is anticipated that some interim financing will be necessary to fund engineering design and property acquisition prior to permanent financing.

The Phase 2 WWTP improvements described in the IMP are currently forecasted for implementation in the year 2032 to allow the City sufficient time to service existing debt on three bonds used to make previous improvements at each of the three WWTPs. The City's currently wastewater bonds and repayment schedules are as follows:

- **2000A Wastewater Bond SRF** - Approximately $425,000 per year through 2020 for Southeast WWTP improvements
- **2006A Wastewater Bond SRF** - Approximately $250,000 per year through 2020 for Southwest WWTP improvements
- **2012 Wastewater Bond COP** - Approximately $275,000 per year through 2032 for Southeast WWTP disinfection improvements
These existing bond obligations, combined with the newly approved revenue bond to address Phase 1 improvements, will preclude the City from taking on new debt to address Phase 2 until at least 2032. These conclusions will be reevaluated during future updates to the IMP and could be reprioritized based on the changing infrastructure needs, regulatory demands, community priorities, or economic conditions.

The City does not currently charge a dedicated stormwater fee. Stormwater funding is derived from the street capital improvement fund and averages approximately $400,000 (in 2018 dollars) per year. This equates to a cost of approximately $4.25 per customer. For planning purposes, the IMP assumes that this same level of funding will continue into the future.

**Residential Affordability Considerations**

EPA’s Framework recommends that integrated plans provide a financial strategy and capability assessment that demonstrates system improvements can be sufficiently funded over time. In doing so, both EPA\(^{18}\) and MDNR\(^{19}\) understand the importance of maintaining ratepayer affordability and recognize that there is no “one-size-fits-all” approach for determining what is affordable in every community.

Although it is an imperfect indicator, historical EPA guidance\(^{20}\) has generally characterized affordability relative to the community’s median household income (MHI). EPA considers financial impacts to be low if average bills are less than 1% of community MHI, mid-range if average bills are between 1% and 2% of MHI, and high if they are greater than 2% of MHI. The City’s combined wastewater and stormwater bills are currently in the mid-range category according to EPA’s guidance. As discussed in the previous section, the City recently adopted rate increases through 2021 to fund the WWTP improvements, but they have not yet determined if rate increases beyond that date are necessary. For planning purposes, the IMP assumes that average bills after 2021 will increase at a rate consistent with the national average (3.1% per year after inflation). With these projected increases, costs will exceed 2% MHI at the end of the IMP planning period.

By approving the SAF and an increased volumetric rate for wastewater, the City Council has established the necessary finance strategy to implement the planned near-term IMP projects. In doing so, the Council has also made the determination that the increased wastewater rate (per 5,000 gallons of usage) through 2021 and existing stormwater cost is affordable to ratepayers. The need for additional funding to address existing or future IMP projects will be reevaluated during future revisions to the IMP.

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7. 5-Year IMP Action Plan

Element 4 of EPA's Framework recommends that municipalities identify an schedule for their projects but recognize that adaptive management strategies are key to successful integrated planning. This means monitoring and evaluating projects and practices as work proceeds (Element 5), and adapting or revising plans and designs as new information is developed (Element 6).

The suite of alternatives presented in the sections above reflects the City's understanding of infrastructure and regulatory priorities over the next 20-years with respect to the information currently available. However, uncertainties exist which preclude those priorities could change as additional needs or regulatory requirements are identified over time. Therefore, the forecasted timing and cost of wastewater and stormwater program improvements currently identified should be considered planning level estimates that must reevaluated over time.

Consistent with Elements 5 and 6, the City anticipates implementing the IMP in a phased approach to provide investment certainty over the next 5 to10 years but allow flexibility to respond to new regulatory or non-regulatory needs that arise over the 20-year planning horizon. To implement early actions, the City will pursue a 5-Year IMP Action Plan focused on implement critical, near-term projects and evaluating the resulting water quality benefits and system performance improvements. The City will pursue these actions to the extent possible but acknowledge that funding, staff availability, and other resource constraints or unanticipated needs may impede complete implementation of the action plan. After five years, the City will use the new information to revise IMP projections with respect to evolving regulatory requirements and program needs.
### Wastewater Treatment

<table>
<thead>
<tr>
<th>Program or Project</th>
<th>Goal</th>
<th>Anticipated Actions</th>
<th>Targeted Community Benefits</th>
</tr>
</thead>
</table>
| Phase 1 WWTP Improvements    | Implement Phase 1 WWTP improvements at Vichy Road and Southeast WWTP to address Voluntary Compliance Agreement requirements. | - Coordinate with MDNR to gain Facility Plan and SRF approval.  
- Pursue November 2018 revenue bond election (Complete).  
- Construct Vichy Road and Southeast WWTP improvements by August 2021.                                                                                     | - Achieve regulatory compliance.  
- Improve water quality.  
- Improve public health and safety protections.  
- Reduce system failures.  
- Provide sustainable services for the future.                                                                                                             |
| Maintenance and Cleaning     | Implementing existing programs to provide effective wastewater collection services, reduce IL and infiltration, rehabilitate existing assets, and practically mitigate overflows. | - Maintain existing funding level to clean pipes and respond to emergency calls.  
- Maintain existing funding level to conduct prioritized inspection of sewer mains and manholes, smoke and dye testing, stream crossing inspections, and private IL reduction.  
- Maintain existing funding level to reduce IL from entering the system from public sources and impacting stream water quality.  
- Maintain existing funding level to address community growth or improve the ability to convey wet-weather flows.  
- Address pump station maintenance, as needed.  
- Continue to update system inventory database.                                                                                                            | - Achieve regulatory compliance.  
- Improve water quality.  
- Improve public health and safety protections.  
- Reduce system failures.  
- Provide sustainable services for the future.                                                                                                             |
| Evaluation and Renewal       | Revise existing SWMP to reflect watershed-based management approach. | - Develop new watershed-based SWMP in coordination with MDNR.  
- Implement actions to meet existing SWMP  
  - Native riparian plantings in impaired stream watersheds.  
  - Filter strip installation at City Hall.  
  - Downsize outfalls at detention basins to allow for slower drainage and additional settling.  
  - Stream walks to address IDDE requirements.  
  - Outreach activities to target impairment parameters (bacteria and sediment).  
  - Impervious surface mapping.                                                                                                                                  | - Improve public health and safety protections.  
- Improve water quality.  
- Achieve regulatory compliance.                                                                                                                                |
| Capacity Enhancements Pump Stations | Replace up to 10 miles of corrugated metal pipe (CMP) in coordination with roadway projects. | - The following replacement activities are planned but may be modified based on roadway project schedules and available funding:  
  - 2019 – 0.1 miles  
  - 2020 – 0.1 miles  
  - 2021 – 3.1 miles  
  - 2022 – 2.5 miles  
- Provide sustainable services for the future.                                                                                                                      | - Improve public health and safety protections.  
- Provide sustainable services for the future.                                                                                                                   |
| Stormwater Management        | Revise existing SWMP to reflect watershed-based management approach. | - Develop new watershed-based SWMP in coordination with MDNR.  
- Implement actions to meet existing SWMP  
  - Native riparian plantings in impaired stream watersheds.  
  - Filter strip installation at City Hall.  
  - Downsize outfalls at detention basins to allow for slower drainage and additional settling.  
  - Stream walks to address IDDE requirements.  
  - Outreach activities to target impairment parameters (bacteria and sediment).  
  - Impervious surface mapping.                                                                                                                                  | - Improve public health and safety protections.  
- Improve water quality.  
- Achieve regulatory compliance.                                                                                                                                |
| Water Quality Planning       | Coordinate with MDNR to plan, evaluate, and interpret new water quality and system data as it becomes available. | - Continue to track and report system overflow and bypass information.  
- Coordinate MDNR bacteria sampling activities in Little Beaver Creek and Dutro Carter Creek to reassess impairment.  
- Summarize and review effluent and instream monitoring data collected for each WWTP under their respective discharge permits.  
- Coordinate with MDNR to evaluate the use of alternative restoration approaches in lieu of TMDL development.                                                                 | - Evaluate IMP effectiveness with respect to water quality.  
- Provide technical basis for future IMP modifications.                                                                                                         |

**Activities to Measure Water Quality Improvements**

<table>
<thead>
<tr>
<th>Program or Project</th>
<th>Goal</th>
<th>Anticipated Actions</th>
<th>Targeted Community Benefits</th>
</tr>
</thead>
</table>
| Maintenance and Cleaning | Maintain existing funding level to clean pipes and respond to emergency calls. | - The following replacement activities are planned but may be modified based on roadway project schedules and available funding:  
  - 2019 – 0.1 miles  
  - 2020 – 0.1 miles  
  - 2021 – 3.1 miles  
  - 2022 – 2.5 miles  
- Provide sustainable services for the future.                                                                                                                      | - Improve public health and safety protections.  
- Provide sustainable services for the future.                                                                                                                   |

**Note 1**: Goals and actions identified in this 5-Year IMP Action Plan reflect the City's understanding of infrastructure and regulatory needs and priorities with respect to the information currently available. The City will implement these actions to the extent possible, but acknowledge that weather, staff availability, and other resource constraints or unanticipated needs may impact complete implementation of the Action Plan or require that it be modified. Further, the City notes that many of the activities outlined in this Action Plan assume that sufficient additional funding will be made available through bond financing that must be approved through a local election.

**Note 2**: Element 5 of EPA's Framework requires that municipalities outline activities that will be used to measure IMP effectiveness. Activities listed here will be used to measure water quality improvements that occur over time.
Rolla Integrated Management Plan
Attachments
Attachment A. City of Rolla’s Anticipated Clean Water Act Compliance Timeline.

City of Rolla’s Clean Water Act Compliance Timeline

- **2005**
  - WBCR (MO), UAA (MO)
  - Missouri Affordability Statute

- **2006**
  - Burker Branch, Little Beaver Creek, and Durot Cartter Creek
  - Listed for DO (MO)

- **2009**
  - Lake Nutrient Criteria (MO), UAA (MO)

- **2011**
  - Wet-Weather Voluntary Compliance Agreement (MO)
  - RODS (MO), Discharges Allowed (MO)

- **2012**
  - Compliance Schedules (MO), Nutrient Reduction Strategy (MO)
  - Little Beaver Creek (MO), listed for Bacteria (MO)
  - Integrated Planning Memorandum (FPA), Bacteria Criteria (FPA)

- **2014**
  - RODS Permit Renewal (MO) - Vichy Road WWTP Disinfection
  - Durot Cartter Creek (MO), listed for Bacteria (MO)
  - Wet-Weather Voluntary Compliance Agreement Extension (MO)
  - MSG Permit Renewal and SWMP Revisions (MO)

- **2018**
  - MSG Permit Renewal (MO) - Wet-Weather Compliance (MO)
  - Durot Cartter Creek TMDL Compliance Schedules to Address 2022 Regulatory Changes, MNR Actions

- **2020**
  - MSG Permit Renewal and SWMP Revisions (MO)
  - Stream Nutrient Criteria (MO), Small Stream Assessment Procedures (MO)

- **2024**
  - MSG Permit Renewal and SWMP Revisions (MO) - Comply with 2022 and 2025 Regulation Changes, Address Burker Branch, Durot Cartter Creek, and Little Dry Fork TMDLs.

- **2025**
  - MSG Permit Renewal and SWMP Revisions (MO)
  - Gulf of Mexico TMDL (EPA)
  - TMDL Implementation Plan (MO)

- **2028**
  - MSG Permit Renewal and SWMP Revisions (MO)
  - MSG Permit Renewal and SWMP Revisions (MO)

- **2030**
  - MSG Permit Renewal and SWMP Revisions (MO)
  - MSG Permit Renewal and SWMP Revisions (MO)

**Timeline Notes:**
- 2020-2029: Missouri Nutrient Loss Reduction Strategy - Phase 1
- 2019-2024: Missouri Nutrient Loss Reduction Strategy - Phase 2

**Regulatory Actions:**
- 2022: Ammonia Criteria (MO)
- 2021: TMDL Implementation Plan (MO)
- 2020: Stream Nutrient Criteria (MO), Nutrient Criteria (MO), Human Health Criteria (MO), Dissolved Oxygen Criteria (MO)
- 2019: Nutrient Criteria (MO)

**State/Federal Actions:**
- 2022: Nutrient Criteria (MO)
- 2019: Nutrient Criteria (MO)
- 2020: Nutrient Criteria (MO)

**Projects:**
- 2020: Gulf of Mexico TMDL (EPA)
- 2022: TMDL Implementation Plan (MO)
- 2019: Nutrient Criteria (MO)

**Locations:**
- Southeast WWTP
- Southwest WWTP
- Vichy Road WWTP
- MS4
- State/Federal Action or Regulation
## Attachment B. IMP Cost Projection Summary.

### Attachment B.1. 2018 through 2027 Projections.

<table>
<thead>
<tr>
<th>Project Category</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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### Attachment B. IMP Cost Projection Summary.

#### Attachment B.2. 2028 through 2039 Projections.

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COMMENTARY:

Attached is a memo submitted to College Hills West Sewer District regarding the new collection system. We were able to substantially complete the system for the one-time assessment of $3,000.00 for single-family and $1,500 per unit for multi-family.

We have billed this assessment as well as the assessments of $600.00 in Shady Oaks and $100.00 in Cedar Grove. We have 100 customers in these three areas. We have met with all three sewer district boards and have been authorized to submit tax bills for collection. Any amounts which are not paid as of March 1st will have tax liens applied. The following is a summary of billing for each district.

**Cedar Grove**
- Users: 14
- Amount Owed: $1,400.00
- Amount Paid: $1,248.02
- Notes: There are two users with balances.

**Shady Oak**
- Users: 54
- Amount Owed: $33,000.00
- Amount Paid: $23,178.00
- Notes: There are 24 users with balances (4 with zero payments).

**College Hills**
- Users: 32
- Amount Owed: $97,500.00
- Amount Paid: $76,877.00
- Notes: There are eight users with balances (2 with zero payments).

Billing – City has billed $91,500.00 with $14,623.00 left to repay.

The annual district meeting for all three of the districts will be held on May 14, 2019 at 6:30 pm in the Phelps County Courthouse Multi-Purpose Room.

We also meet with the Shady Oak Sewer District Board on the question of annexing an 8-plex on County Road 5030. The board has approved the annexation. The owner of the 8-plex would be responsible for all cost to connect the units to the system. A drawing is attached depicting the location of annexation.

We are planning to bring the annexation request to the County Commission for approval.
Staff recommends council approval for the substantial completion cost of the College Hills sewer system with final resolution cost not to exceed the reserves balance of the College Hills West Sewer District.

Staff further recommends council approval for the approval of the annexation of the 8-plex on County Road 5030 to the Shady Oaks Sewer District.
Memo

To: Rolla City Council and Administration
    College Hills West Sewer District Board Members

From: Steve Hargis, P.E. Director of Public Works

Date: 12-12-2018

Subject: College Hills Sanitary Sewer Improvements Status

The Sewer Improvements in the College Hills District have reached substantial competition and the individual members have been billed the one-time assessment of $3,000 for signal family and $1,500 per unit for multi-family units. The breakdown of the project was as follows:

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The project will be repaid as follows:

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There is a little yard restoration work and one lateral that still needs to be repaired. This work will be billed next year and paid out of reserves. The reserves has a balance of approximately $11,000. We will give an update on these finances at the District Meeting to be held on May 14, 2019 at 6:30 p.m. in the Phelps County Courthouse Multipurpose Room.
Since 1997, the City of Rolla Fire & Rescue has provided a yearly medical physical to all fire personnel. These physicals are a part of the wellness procedures as established by the Federal HAZWOPER Program (OSHA & EPA) which require a medical physical for all hazardous material teams, Missouri Heart and Lung Statue, and National Fire Protection Agency 1582 for firefighter health and wellness.

Over the last several years, firefighters have been increasingly affected by cancer diagnosis. Firefighters have a 9% higher risk of being diagnosed with cancer and a 14% higher risk of dying from cancer than the general U.S. population. Firefighter's risks are significantly higher for some specific cancers such as mesothelioma having a 100% increased risk.

For the last several years, the physicals were provided through Mercy Medical Group. Due to recent changes in the medical protocol, Mercy Medical has asked to not submit a bid for the current two year contract.

An internal committee was formed to reach out to medical groups which could meet the medical protocols and provide the services needed over a two year contract.

Our committee worked with Phelps Health of Rolla and SiteMed of Marietta, Georgia. Each group was able to meet the required protocols with some of the major aspects listed below: Comprehensive medical examination, fitness examination, blood screening to include heavy metals, blood borne pathogens, and cancer markers, chest X-ray, and PSA screening.

Through the bid process both agencies submitted a bid with SiteMed providing a substantially lower two year proposal. SiteMed currently provides on-site physicals for many Missouri Fire Departments to include Jefferson City Fire Department, Springfield Fire Department, and Central Jackson County.

Fire Administration recommends approval of a two year contract with SiteMed for $20,980 annually.
Firefighter Cancer Support Network | FirefighterCancerSupport.org

Firefighter cancer fact check

Although cancer is the leading cause of firefighter line-of-duty deaths, firefighters are not “68 percent more likely to develop cancer than the general population.” Accurate data is crucial when quantifying occupational cancer's toll on - and threat to - firefighters and their families. Recently, a number of well-intended journalists, legislators, manufacturers, and others have cited inaccurate firefighter cancer statistics, including the following erroneous examples:

- "the risk of cancer in firefighters is 250% greater than in people not in our line of work."
- "In all, researchers found that more than two-thirds of firefighters - 68% - develop cancer, compared to about 22% for the general population..."
- "Firefighters...have a 68% higher risk of being diagnosed with cancer than the general population."
- "Research is showing 68% of firefighters will come down with cancer on average."
- "...More than two-thirds of firefighters are diagnosed with cancer..."
- "...63% of all firefighters will get cancer..."
- "...[Researchers] found that firefighters are twice as likely to be diagnosed with cancer..."
- "...[Firefighters are 50 percent more likely to be diagnosed with cancer than the...U.S. population."
- "A firefighter has a 29% higher risk of contracting cancer than the rest of our population."

The proliferation of inaccurate statistics concerns Robert D. Daniels, PhD, CHP. In 2010, Daniels led the largest cancer study of U.S. firefighters to date for the National Institute for Occupational Safety and Health (NIOSH). "Some sources cite our study as reporting a two-fold excess of cancer among firefighters, then go on to say that two-thirds of firefighters are diagnosed with cancer," Daniels said. "Neither statement is correct."

Here are the facts: Firefighters have a 9 percent higher risk of being diagnosed with cancer and a 14 percent higher risk of dying from cancer than the general U.S. population, according to the NIOSH study results. The cancers mostly responsible for this higher risk were respiratory (lung, mesothelioma), GI (oral cavity, esophageal, large intestine), and kidney.

It's important to note that firefighters' risks are significantly higher for some specific types of cancer. The NIOSH researchers did report a two-fold excess of malignant mesothelioma, a very rare cancer. Put another way, firefighters have a 100 percent increased risk (100% = double = 2 times) of getting mesothelioma. Firefighters have a 129 percent increased risk of dying from mesothelioma. (The earlier LeMasters meta-analysis also reported a two-fold excess for testicular cancer.)

Firefighters have a 62 percent higher risk of getting esophageal cancer, and they have a 39 percent increased risk of dying from esophageal cancer, according to the NIOSH research.

Here's an overview with some specific additional risks for firefighters noted:

- testicular cancer - 2.02 times the risk (again: 100% = double = 2 times)
- mesothelioma - 2.0 times greater risk;
- mesothelioma - 2.0 times greater risk;
- multiple myeloma - 1.53 times greater risk;
- non-Hodgkin's lymphoma - 1.51 times greater risk;
- skin cancer - 1.39 times greater risk;
- malignant melanoma - 1.31 times greater risk;
- brain cancer - 1.31 times greater risk;
- prostate cancer - 1.28 times greater risk;
- colon cancer - 1.21 times greater risk; and
- leukemia - 1.14 times greater risk.

Note that some fire departments are addressing occupational cancer rates that are higher than national averages. FCSN instructors cite insurer statistics for Miami-Dade Fire Rescue: 32 percent (nearly one-third) of MDFR's active members were diagnosed with cancer or receiving cancer treatment between 2008-2010.

Bottom line: Firefighters do have higher cancer risks than the general population, and their risks are significantly higher for some specific types of cancer.

We encourage journalists, legislators, and others who address occupational cancer to contact the nonprofit Firefighter Cancer Support Network at FCSN.org for accurate information and vital context about cancer in the fire service.

In the meantime, if you see inaccurate claims, please politely share these correct statistics and suggest a revision.

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AGREEMENT

This agreement made and entered this date ______ of ____________________, 2018 between SiteMed and Rolla Fire & Rescue Department. This agreement shall exist for an initial period of two (2) years with annual scheduling on the below listed date for the above listed services and will automatically renew for successive scheduling annually thereafter unless otherwise notified by either party 60 days prior to scheduled testing.

Any cancellations made less than 30 days prior to scheduled dates will incur charges of 50% of the Minimum Charge for time scheduled if not rescheduled for a later date. Cancellations made more than 30 days prior to scheduled dates will incur charges of 25% of the Minimum Charge if not rescheduled for a later date. Rescheduling of services will not incur cancellation fee. The above listed pricing will only be guaranteed for the initial period of two (2) years and only while above listed volume of testing remains the same or greater. Invoices are “Due upon Receipt”. Increase in employee numbers may require additional testing dates.

We, the undersigned, duly authorized representatives of the above parties do hereby agree to the statement and conditions outlined above.

Rolla Fire & Rescue Department – Representative

Date

SiteMed – Representative

Date

\[\text{ON-SITE FIREFIGHTER PHYSICALS}\]
1634 White Circle – Suite 101
Marietta, GA 30066
SiteMedFire.com

112 Donmoor Court
Garner, NC 27529
Phone/Fax 888-837-4819
AGREEMENT

The firefighter physical program includes the services listed on pages 3 & 4, technician(s) and medical provider. Also, as per our discussion, this proposal is based on doing your physical exams (includes 6 Chest X-rays, and 29 Cholinesterase, RBC and Heavy Metals Blood Test) while we are doing another fire department in your area.

<table>
<thead>
<tr>
<th>Phase I (Blood Draw) days</th>
<th>1 day up to 4 hours</th>
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<tbody>
<tr>
<td>Phase II (Testing) days</td>
<td>1 day up to 8 hours</td>
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Includes Medical and Fitness Component

Minimum number of exams 29 @ $ 619 each = $ 17,980

Optional Services:
- CRP (C-Reactive Protein) 29 @ $ 15 each = $ 435
- HIV screening 29 @ $ 25 each = $ 725
- Hemoglobin A1C 29 @ $ 40 each = $ 1,160
- Fecal Occult Blood Screening 17 @ $ 18 each = $ 306
- PSA Screening 17 @ $ 22 each = $ 374

Total with Optional Services = $ 20,980

Bloodwork will be drawn in the morning approximately 3-4 weeks prior to testing. Statistics will be submitted in a timely manner following last day of testing.

Additional fees of $20 per person will apply for labs collected at LabCorp facility due to missed appointments or absenteeism during Phase I.

**Program will be broken down as follows:**

**Phase 1:** Laboratory specimen collection at your facility 3-4 weeks prior to Phase 2

**Phase 2:** All other services including physical exam

**Scheduling of services is as follows:** To be determined

**Billing of services is as follows:**
- 25% to be invoiced after Phase I is completed
- 75% to be invoiced after Phase II is complete

\[ V.A.4 \]