

**NOTICE OF OPEN MEETING & VOTE TO
CLOSE PART OF THE MEETING
A G E N D A
COUNCIL MEETING
City of Moberly
City Council Room – Moberly City Hall
101 West Reed Street
November 18, 2019
6:00 PM**

Posted:

Pledge of Allegiance

Roll Call

Approval of Agenda

Approval of Minutes

1. City Council Minutes

Recognition of Visitors

Communications, Requests, Informational Items & Consent Calendar

Public Hearing and Receipt of Bids

2. Receipt of additional bid for 2020 Police Package SUV for the Police Department.

Ordinances & Resolutions

3. An Ordinance Amending Chapter 22, Article V, Division 2, Section 22-229 Of The Moberly City Code.
4. An Ordinance Authorizing The City Manager To Execute A Financial Assistance Agreement And Memorandum Of Understanding For The Glass Recycling Grant.
5. An Ordinance Authorizing The City Of Moberly, Missouri Equipment Lease Purchase Agreement And Authorizing And Approving Certain Documents In Connection With The Delivery Of The Lease.
6. An Ordinance Approving A Cooperation Agreement For Coordinated Industrial Land Sales; And Providing Further Authority.
7. A Resolution Accepting The Bid Of Moberly Motors For A 2020 Ford Police Interceptor Explorer And Authorizing The Purchase For \$33,599.
8. A Resolution Of The City Of Moberly, Missouri, Authorizing Filing Of Proposed Technical Standard Specifications Codes For Sanitary Sewer Systems And Water Main Construction.
9. A Resolution appropriating money out of the Treasury of the City of Moberly, Missouri.

Official Reports

10. Department Head Monthly Reports

Anything Else to Come Before the Council

11. Application for Board of Adjustment.
12. Consideration of a Motion to adjourn to a Work Session followed by a Closed Session to discuss the status of pending legal (Closed Statutes 610.021) (1)

Adjournment

The public is invited to attend the Council meeting. Representatives of the news media may

obtain copies of this notice by contacting the City Clerk. If a special accommodation is needed as addressed by the Americans with Disabilities Act, please contact the City Clerk twenty-four (24) hours in advance of the meeting.

October 21, 2019
City of Moberly, Missouri Council Minutes

Council met in regular session at 6:00 p.m. in the City Hall Council Chambers with Mayor Jeffrey presiding.

All stood and recited the pledge of allegiance led by Mayor Jeffrey.

Council Members answering the roll call were: Jerry Jeffrey, Tim Brubaker, John Kimmons and Austin Kyser. Absent: Cole Davis.

A motion was made by Kyser and seconded by Brubaker to approve the agenda. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

A motion was made by Kyser and seconded by Kimmons to approve the minutes of September 16, 2019, September 18, 2019, October 7, 2019 and October 16, 2019 Council meetings as presented. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

A request was received from Chris Wertz, Commander, Veterans of Foreign Wars Post 2654, for a VFW Veterans Day Parade November 9, 2019, 1:00 p.m. (route to begin on Johnson Street, east on Reed Street, south on Clark Street and disband). A motion was made by Brubaker and seconded by Kyser to approve the request. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

A request was received from Jamie Shirk, to hold a 5k walk/run Turkey Trot (fund raiser for YMCA Strong Kids Campaign), November 28, 2019, 8:00 a.m. (route to begin at Championship Sports, 515 W. Reed Street, east on Reed Street, west on Wightman Street, west on Fisk Avenue, north on Rothwell Park Road, right at James Youth Center, south on Holman Road, east on Reed Street, north on Hagood Street, east on Adams Street, south on Johnson Street, east on Reed Street, finish at point of beginning, Championship Sports, 515 W. Reed Street). A motion was made by Kyser and seconded by Kimmons to approve the request. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Receipt of State bid for a 2020 Polaris Ranger 1000, \$11,820.00, for use at the Street Department. A motion was made by Brubaker and seconded by Kimmons to accept the bid. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Kyser introduced a bill for an ordinance entitled: **"AN ORDINANCE RATIFYING A CONSENT AGREEMENT; APPROVING A FIRST AMENDMENT TO COOPERATIVE AGREEMENT; MAKING CERTAIN FINDINGS; AND PROVIDING FURTHER DIRECTION AND AUTHORITY"** and moved that the bill be read two times by title for passage. Kimmons seconded the motion, and upon said motion the vote was as follows: Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis. The bill having previously been made available for public inspection was read by title two times. Brubaker moved that the bill be enacted into an ordinance. Kimmons seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Brubaker introduced a bill for an ordinance entitled: **"AN ORDINANCE AMENDING ORDINANCE NO. 9544 WHICH ACCEPTED AND APPROVED SUPPLEMENTAL AGREEMENT NO. 3 WITH THE MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION FOR THE NORTH MORLEY SIDEWALK IMPROVEMENT PROJECT"** and moved that the bill be read two times by title for passage. Kimmons seconded the motion, and upon said motion the vote was as follows: Ayes: Brubaker, Kimmons, Kyser and Jeffrey. Nays: none. Absent: Davis. The bill having previously been made available for public inspection was read by title two times. Kimmons moved that the bill be enacted into an ordinance. Kyser seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Brubaker, Kimmons, Kyser and Jeffrey. Nays: none. Absent: Davis. Nays: none. Absent: Davis.

Kimmons introduced a bill for an ordinance entitled: **"AN ORDINANCE ACCEPTING AND APPROVING THE REPORT OF THE DIRECTOR OF COMMUNITY DEVELOPMENT CONCERNING THE DEMOLITION OF A STRUCTURE LOCATED AT 709 BENSON STREET, MOBERLY, MISSOURI, CERTIFYING THE COST OF DEMOLITION TO THE CITY CLERK AND DIRECTING THE CITY CLERK PURSUANT TO SECTION 26-24 OF THE MOBERLY CITY CODE TO CAUSE A SPECIAL TAX BILL TO BE ISSUED THEREON"** and moved that the bill be read two times by title for passage. Brubaker seconded the motion, and upon said motion the vote was as follows: Ayes: Kimmons, Kyser, Jeffrey and Brubaker. Nays: none. Absent: Davis. The bill having previously been made available for public inspection was read by title two times. Brubaker moved that the bill be enacted into an ordinance. Kyser seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Kimmons, Kyser, Jeffrey and Brubaker. Nays: none. Absent: Davis.

Kyser introduced **"A RESOLUTION AUTHORIZING THE CITY MANAGER TO PURCHASE A 2020 POLARIS RANGER 1000"** and made a motion for it to be read. Brubaker seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis. The Resolution was read. A motion was made by Kimmons and seconded by Brubaker to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Brubaker introduced **"A RESOLUTION AUTHORIZING THE CITY MANAGER OF MOBERLY, MISSOURI TO PURCHASE EIGHT (8) COMPUTERS FROM STAPLES FOR THE MOBERLY POLICE DEPARTMENT FOR \$5,931.72"** and made a motion for it to be read. Kimmons seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis. The Resolution was read. A motion was made by Brubaker and seconded by Kimmons to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Kimmons introduced **"A RESOLUTION REPEALING RESOLUTION NO. R498 AND THE FLEXIBLE FUNDING POLICY FOR THE HEALTH TRUST FUND"** and made a motion for it to be read. Brubaker seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis. The Resolution was read. A motion was made by Kyser and seconded by Kimmons to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Kyser introduced **"A RESOLUTION APPROPRIATING MONEY OUT OF THE TREASURY OF THE CITY OF MOBERLY, MISSOURI IN THE AMOUNT OF \$942,960.33"** and made a motion for it to be read. Kimmons seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis. The Resolution was read.

A motion was made by Kimmons and seconded by Brubaker to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons and Kyser. Nays: none. Absent: Davis.

Monthly reports were received from various departments.

Members from the news media present were: Bob Ehle, KWIX/KRES Radio Station, Erik Cliburn, Moberly Monitor-Index.

A motion was made by Kyser and seconded by Kimmons to adjourn to a work session. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none. Absent: Davis.

Work Session

The following was discussed at the work session:

Appointment to the Housing Authority Board.

Receipt of bids for new patrol vehicles for Police Department.

Receipt of bids for the Presidential Street CDBG Infrastructure Project.

Review of an agreement with ORBCO for site access/permission to enter property.

Proposals from the Tourism Advisory Commission.

Discussion of a Phase II Solar Amendment.

November 4, 2019
City of Moberly, Missouri Council Minutes

Council met in regular session at 6:00 p.m. in the City Hall Council Chambers with Mayor Jeffrey presiding.

All stood and recited the pledge of allegiance led by Mayor Jeffrey.

Council Members answering the roll call were: Jerry Jeffrey, Tim Brubaker, John Kimmons, Cole Davis and Austin Kyser.

A motion was made by Kimmons and seconded by Davis to approve the agenda. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

The following bids were received for new patrol vehicles for the Police Department: **Moberly Motor Co.**, 2020 Dodge Durango, all-wheel drive and police package \$28,821.00; 2020 Dodge Durango, 5.7L V8, all-wheel drive and police package \$31,397.00; 2020 Dodge Charger, w/V8, front wheel drive, 4 door and police package \$22,667.00; 2020 Dodge Charger, w/V8, all-wheel drive, 4 door and police package \$25,165.00. A motion was made by Kimmons and seconded by Brubaker to accept the bids. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

The following bids were received for the North Buchanan Street Sewer Project: **R & L Boone Construction Co.** \$57,450.00; **Willis Bros. Inc.** \$55,870.00. A motion was made by Davis and seconded by Brubaker to accept the bids. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

The following bids were received for the Presidential Street CDBG Infrastructure Project: **Fisher Grading LLC**, Base Bid, \$849,193.00, add Alternate Bid A, \$108,768.00, add Alternate Bid B, \$113,168.00; **S & A Equipment**, Base Bid, \$971,767.46, add Alternate Bid A, \$149,046.31, add Alternate Bid B, \$132,364.55; **Willis Bros. Inc.**, Base Bid, \$992,911.00, add Alternate Bid A, \$119,236.00, add Alternate Bid B, \$123,770.00; **Stockman Construction Co.**, Base Bid, \$997,504.00, add Alternate Bid A, \$131,086.00, add Alternate Bid B, \$138,057.00. A motion was made by Kimmons and seconded by Kyser to accept the bids. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Kyser introduced a bill for an ordinance entitled: **"AN ORDINANCE AUTHORIZING THE CITY MANAGER TO EXECUTE A COOPERATIVE AGREEMENT FOR SITE ACCESS/PERMISSION TO ENTER PROPERTY WITH ORBCO, INC."** and moved that the bill be read two times by title for passage. Davis seconded the motion, and upon said motion the vote was as follows: Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none. The bill having previously been made available for public inspection was read by title two times. Kimmons moved that the bill be enacted into an ordinance. Brubaker seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Brubaker introduced a bill for an ordinance entitled: **"AN ORDINANCE REPEALING ORDINANCE NO. 9543 AND ACCEPTING THE BID OF WILLIS BROS., INC."**

AND AUTHORIZING CONTRACTING FOR THE HARRISON AVENUE AND GARFIELD AVENUE CDBG INFRASTRUCTURE PROJECT" and moved that the bill be read two times by title for passage. Davis seconded the motion, and upon said motion the vote was as follows: Ayes: Brubaker, Kimmons, Davis, Kyser and Jeffrey. Nays: none. The bill having previously been made available for public inspection was read by title two times. Kimmons moved that the bill be enacted into an ordinance. Brubaker seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Brubaker, Kimmons, Davis, Kyser and Jeffrey. Nays: none.

Kimmons introduced a bill for an ordinance entitled: **"AN ORDINANCE AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT WITH WILLIS BROS. INC., TO CONSTRUCT A SEWER MAIN IN THE 1600 BLOCK OF NORTH BUCHANAN STREET IN MOBERLY, MISSOURI"** and moved that the bill be read two times by title for passage. Davis seconded the motion, and upon said motion the vote was as follows: Ayes: Kimmons, Davis, Kyser, Jeffrey and Brubaker. Nays: none. The bill having previously been made available for public inspection was read by title two times. Brubaker moved that the bill be enacted into an ordinance. Kyser seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Kimmons, Davis, Kyser, Jeffrey and Brubaker. Nays: none.

Davis introduced a bill for an ordinance entitled: **"AN ORDINANCE AUTHORIZING THE CITY MANAGER TO EXECUTE TWO COOPERATIVE AGREEMENTS FOR SEWER INFRASTRUCTURE"** and moved that the bill be read two times by title for passage. Kimmons seconded the motion, and upon said motion the vote was as follows: Ayes: Davis, Kyser, Jeffrey, Brubaker and Kimmons. Nays: none. The bill having previously been made available for public inspection was read by title two times. Kimmons moved that the bill be enacted into an ordinance. Brubaker seconded the motion. The presiding officer having called for a vote on the motion, the vote was as follows: Ayes: Davis, Kyser, Jeffrey, Brubaker and Kimmons. Nays: none. *Nancy Harlow, 1625 N. Buchanan Street, Moberly, Missouri was present and wanted to know the following: when was North Buchanan Street (1625 N. Buchanan Street) annexed into the City limits of the City of Moberly; when did the City get sewer; who pays for the sewer; in 1965 when sewer was put in some areas of Moberly, why not North Buchanan Street (1625 N. Buchanan Street). Charlotte Borron was present and indicated that her son may purchase 1625 N. Buchanan Street and wanted to know what the sewer cost would be. City Manager, Brian Crane said staff would get back to Ms. Harlow and Ms. Borron.*

Kyser introduced **"A RESOLUTION ACCEPTING THE BID OF MOBERLY MOTORS FOR TWO 2020 DODGE CHARGER POLICE PACKAGE SEDANS AND AUTHORIZING THE PURCHASE FOR \$53,890.00"** and made a motion for it to be read. Kimmons seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none. The Resolution was read. A motion was made by Brubaker and seconded by Davis to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Brubaker introduced **"A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AMENDMENT TO THE PHASE II SOLAR SERVICES AGREEMENT AND LICENSE**

AGREEMENT WITH MOBERLY SOLAR LLC" and made a motion for it to be read. Kimmons seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none. The Resolution was read. A motion was made by Kimmons and seconded by Davis to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Kimmons introduced **"A RESOLUTION APPROPRIATING MONEY OUT OF THE TREASURY OF THE CITY OF MOBERLY, MISSOURI IN THE AMOUNT OF \$638,515.96"** and made a motion for it to be read. Davis seconded the motion. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none. The Resolution was read. A motion was made by Brubaker and seconded by Kyser to adopt the Resolution as read. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Monthly reports were received from various departments.

A request was received from Megan Schmitt, Moberly Area Chamber of Commerce for \$2,000.00 Tourism funds for mural placements in Downtown Moberly.

A request was received from Stefanie Riley, Moberly Area Council on the Arts for \$550.00 Tourism funds for advertising for Moberly Area Council on the Arts Fall Concert Series.

A motion was made by Kimmons and seconded by Brubaker to approve \$1,000.00 of the Moberly Area Chamber of Commerce and \$550.00 of the Moberly Area Council on the Arts requests. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Mayor Jeffrey nominated Phyllis Self to be re-appointed to the Housing Authority Board. A motion was made by Davis and seconded by Kimmons to re-appoint Phyllis Self to the Housing Authority Board. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Members from the news media present were: Bob Ehle, KWIX/KRES Radio Station, Erik Cliburn, Moberly Monitor-Index.

A motion was made by Kyser and seconded by Davis to adjourn to a work session followed by a closed session to discuss the status of pending litigation and real estate (MO Statutes 610.021,1,2). Roll call vote: Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

A work session was held followed by a closed session.

Mayor Jeffrey reopened the meeting.

A motion was made by Kyser and seconded by Davis to adjourn. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

Work Session

The following was discussed at the work session:

Standard Specifications for Water and Sanitary Sewer system and construction details.

Receipt of additional bid for 2020 Police Package SUV for Police Department.

Application for Board of Adjustment.

Discussion of a text amendment to City Code Section 22-229 regarding the Historic Preservation Commission Design Guidelines.

A Resolution authorizing the Mayor to enter into agreements with First State Community Bank for the lease purchase financing of water meters and automated meter reading equipment, billing and accounting software and energy efficient equipment for the Water Treatment and Waste Water Treatment Plants.

November 6, 2019
City of Moberly, Missouri Council Minutes

Council met in special session at 12:00 p.m. at Moberly Fire Station #1, 310 N. Clark Street, Moberly, Missouri with Mayor Jeffrey presiding.

Council Members answering the roll call were: Jerry Jeffrey, Tim Brubaker, John Kimmons, Cole Davis and Austin Kyser.

Members from the news media present were: Erik Cliburn, Moberly Monitor-Index.

A motion was made by Kyser and seconded by Davis to adjourn to a work session. Ayes: Jeffrey, Brubaker, Kimmons, Davis and Kyser. Nays: none.

The following was discussed at the work session: The study and conditions assessment with recommendations of City of Moberly Fire Stations #1 and #2 by Rick Kuhl and Dalyn Novak from Williams, Spurgeon, Kuhl & Freshnock Architects, Inc., also tours of Fire Stations #1 and #2 were held.

City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: Police Dept.
 Date: November 18, 2019

Agenda Item: Receipt of additional bid for 2020 Police Package SUV for the Police Department.

Summary:

A request for bids for two patrol cars and one SUV for the police department were requested from Moberly Motors, Joe Machens Ford, Thomas Motors and Bob McCosh Chevrolet. Only Moberly Motors submitted bids. The bid tabulation is attached. Required upgrades to the Durango; vinyl rear seats, rubber interior flooring, center console and noise suppression increase the price to 31,573. If the interior emergency lights do not transfer, and the console for the Durgano does not accept our current two radio and light controls, the price will increase approximately another 3,400 dollars to 34,973. Based on these prices, the Police Department requests the bid for the 2020 Ford Police Interceptor Explorer AWD 4-door for \$32,898 and equipment group 67U and 67V, ultimate wiring package and the Police Wire Harness Kit (Front and Rear) for 701 dollars for a total cost of \$33,599. Adding the wiring package and harness kit greatly helps the installation of the radio, lights, computers and in-car camera. State bid price for the Explorer is 33,482.

Recommended

Action: Accept these bids

Fund Name: Police Department CIP

Account Number: 100-007-5502

Available Budget \$:
101,128.00

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input checked="" type="checkbox"/> Staff Report	<input type="checkbox"/> Proposed Ordinance	M__ S__ Jeffrey	___	___
<input type="checkbox"/> Correspondence	<input type="checkbox"/> Proposed Resolution	Council Member		
<input checked="" type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M__ S__ Brubaker	___	___
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M__ S__ Kimmons	___	___
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M__ S__ Davis	___	___
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M__ S__ Kyser	___	___
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

CITY OF MOBERLY

"BID OPENING"

Date: 10-11-2019 10:00 AM

2020 Dodge Durango AWD ^{Police} PKG	\$ 28,821
5.7L V8	
2020 Dodge Durango AWD - ^{Police} PKG	\$ 31,397
w/ V8 - 4 door	
2020 Dodge Charger w/ ^{Police} PKG	\$ 22,067
for (2) ↑	\$ 45,334
+ AYW option	\$ 1,024 extra ea
+ AYE option	\$ 1,780 extra ea
w/ V8 - 4 door	
2020 Dodge Charger w/ ^{Police} PKG	\$ 25,165
for (2) ↑	\$ 50,330
+ AYW option	\$ 1,024 extra ea
+ AYE option	\$ 1,780 extra ea
	\$
	\$
	\$
	\$

City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: Community Development
 Date: November 18, 2019

Agenda Item: An Ordinance Amending Chapter 22, Article V, Division 2, Section 22-229 Of The Moberly City Code.

Summary: The Historic Preservation Commission reviewed and approved recommendation to amend the City Code Section 22-229 at the September 2019 Meeting. The amendment is written to give authority from the Historic Preservation Commission to an administrative panel (the architect on the HPC board and Community Development Director or designee) to review and determine approval of changes to the exterior elements of a building located in the Historic District. Administrative review is granted for items that follow the already adopted historic design guidelines. Any items that do not follow the historic design guidelines will go before the HPC Board for a Certificate of Appropriateness.

The Historic Preservation Commission recommends approval of the text amendment. The City of Moberly Staff recommends approval of the text amendment.

Recommended

Action: Approve this ordinance

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input type="checkbox"/> Staff Report	<input checked="" type="checkbox"/> Proposed Ordinance	M__ S__ Jeffrey	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Correspondence	<input type="checkbox"/> Proposed Resolution	Council Member		
<input type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M__ S__ Brubaker	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M__ S__ Kimmons	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M__ S__ Davis	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M__ S__ Kyser	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

BILL NO: _____

ORDINANCE NO: _____

AN ORDINANCE AMENDING CHAPTER 22, ARTICLE V, DIVISION 2, SECTION 22-229 OF THE MOBERLY CITY CODE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOBERLY, MISSOURI TO WIT:

SECTION ONE: Sec. 22-229 is hereby amended by adoption of the following subsections:

(c) Applications for Certificate of Appropriateness may be reviewed by the Director of Community Development or his/her designee for completeness and qualification for administrative review by the Historic Preservation Commission Architect and the Director of Community Development or his/her designee.

(d) Administrative review of Certificates of Appropriateness is available to those projects that qualify by meeting the approved criteria of the HPC Commission in the Historic Design Guidelines Addendum. Items reviewed administratively that are not approved may be presented to the HPC Commission for review

SECTION TWO: The Historic Preservation Commission shall adopt criteria for projects to be administratively reviewed and publish said criteria as an Addendum to the Historic Design Guidelines Addendum.

SECTION THREE: This ordinance shall be in full force and effect upon passage by the City Council.

PASSED AND ADOPTED by the Council of the City of Moberly, Missouri, this 18TH day of November, 2019.

Presiding Officer at Meeting

ATTEST:

City Clerk

Insert the following into Section 22-229

(c) Applications for certificate of appropriateness shall be reviewed by the Director of Community Development or his/her designee for completeness and qualification for administrative review by the Historic Preservation Commission Architect and the Director of Community Development or his/her designee.

(d) Administrative review of Certificates of Appropriateness is available to those projects that qualify by meeting the approved criteria of the HPC Commission in the Historic Design Guidelines Addendum. Items reviewed administratively that are not approved can be taken to the next Historic Preservation Meeting for review.

Historic Design Guidelines Addendum.

The following items may be reviewed through Administrative review for compliance with the Historic Design Guidelines. The intention is to create an acceptable list of items that can be readily reviewed and approved that meet the Historic Design Guidelines and improve the efficiency of the process for the applicants.

Items allowed for administrative review:

- 1) Painting or repainting of any non-masonry component of the building façade that is selected in the spectrum of the approved color palette in the Historic Design Guidelines. Repainting of any already painted surface will be allowed so long as it has been reviewed and determined that the masonry surface below would not be able to be preserved.
- 2) Projecting signs not larger than 42" in a single dimension that presents the name of the business or logo only. Excessive text will require review by the Historic Preservation Commission.
- 3) Raised letters or logos that are individually attached to the building façade.
- 4) ADA Compliance ramps that meet the standard of concrete construction and with black metal railing. Exception, Reed Street entries shall be recessed into the building to accommodate handicap entry when possible.
- 5) Windows selected from an approved historic list of windows and match the style of windows historically used in the building.
- 6) Utility installations in which the infrastructure and handholds are located below grade.
- 7) Review of exterior improvements that are not located on a street frontage.

City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: Community Development
 Date: November 18, 2019

Agenda Item: An Ordinance Authorizing The City Manager To Execute A Financial Assistance Agreement And Memorandum Of Understanding For The Glass Recycling Grant.

Summary: The MOU is an assurance that the parties involved will not make any effort to sell or lease the ground on which the bunker (grant funded) will be placed for at least 5 years. It also puts discusses that the equipment that is purchases will be on a 5 year prorated schedule for partial grant payback should we discontinue the program. As long as we operate the program for at least 5 years, all of the requirements of the MOU will expire.

Recommended

Action: Approve this ordinance.

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input type="checkbox"/> Staff Report	<input checked="" type="checkbox"/> Proposed Ordinance	M___ S___ Jeffrey	___	___
<input type="checkbox"/> Correspondence	<input type="checkbox"/> Proposed Resolution	Council Member		
<input type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M___ S___ Brubaker	___	___
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M___ S___ Kimmons	___	___
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M___ S___ Davis	___	___
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M___ S___ Kyser	___	___
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice		Passed	Failed
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____			

BILL NO. _____

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO EXECUTE A FINANCIAL ASSISTANCE AGREEMENT AND MEMORANDUM OF UNDERSTANDING FOR THE GLASS RECYCLING GRANT.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOBERLY, MISSOURI, TO-WIT:

SECTION ONE: The City Council previously authorized an application for a Recycling Grant (the “Grant”) with the Missouri Department of Natural Resources (DNR) for glass recycling services through the Mark Twain Solid Waste Management District (the “District”).

SECTION TWO: DNR approved the recycling grant to be administered by the District with a net funding amount of \$71,700.00 requiring a local match of \$14,340.00 to be set forth in a Financial Assistance Agreement (the “Agreement”) to be executed by the parties.

SECTION THREE: Prior to distributing grant funds DNR requires that the Agreement be executed by the city and that an MOU be put in place to create a security interest for the District to insure compliance with the Agreement.

SECTION FOUR: The Agreement and MOU attached hereto are hereby approved and the City Manager or his designee are hereby authorized to execute the documents on behalf of the city and are further authorized to execute all other documents necessary to complete the funding of the city recycling grant.

SECTION FOUR: This Ordinance shall be in full force and effect from and after its passage and adoption by the Council of the City of Moberly, Missouri, and its signature by the officer presiding at the meeting at which it was passed and adopted.

PASSED AND ADOPTED by the Council of the City of Moberly, Missouri, this 18th day of November, 2019.

ATTEST:

Presiding Officer at Meeting

City Clerk

Memorandum of Understanding

This Memorandum of Understanding ("the Agreement") is made and entered into by and between the Advanced Disposal Services ("Advanced Disposal"), City of Moberly, Missouri (City) and the Mark Twain Solid Waste Management District ("the SWMD").

WHEREAS, the SWMD Executive Board pursuant to Chapter 260, RsMo, and implementing regulations at 10 CSR 80-9.050 evaluated, ranked and approved a solid waste management district grant application received from the City of Moberly for construction of a concrete glass recycling bunker as detailed in the G2019-003 City of Moberly Glass Recycling grant application and financial assistance agreement with the SWMD which are incorporated here with in their entirety.

WHEREAS, Advanced Disposal, the City and the SWMD wish to enter into this Agreement to provide the SWMD a five (5) year security interest in the concrete glass recycling bunker, and site improvements that were constructed and purchased using Solid Waste Management Funds provided under the district grant received by the City of Moberly from the SWMD. Advanced Disposal, the City and the SWMD come together to execute this Agreement for the project known here in after as the "City of Moberly Glass Recycling" or "the Project."

NOW THEREFORE, Advanced Disposal, the City and the SWMD agree to the following:

1. Advanced Disposal and the City hereby covenant that they will not transfer, sell or pledge the SWMD's security interest in the concrete glass recycling bunker or site improvements as collateral for any indebtedness whatsoever without first obtaining the prior written consent of the SWMD.
2. If the property is sold, the SWMD's security interest and the City's property interest in the concrete glass recycling bunker shall not transfer to the buyer but remain as stated herein and Advanced Disposal must notify the buyer of these agreements. Upon sale of the property the new landowner shall execute a clause to this MOU agreeing to continuation of the City's concrete glass recycling bunker and the SWMD's security interest as set out herein.
3. Unless the SWMD notifies the City in writing of a material breach of the Financial Assistance Agreement or any documents incorporated herewith, the security interest the SWMD shall decrease at a rate of 20% per annum, beginning one year from the date the financing statement is fully executed.
4. Upon written notification of a material breach of the Financial Assistance Agreement or any documents incorporated herewith, the City hereby agree to reimburse the SWMD the pro rata share of the amount of the funding originally provided by the

SWMD for the Project based upon the provisions of section 2 of this Agreement.

- 5. When the security interest is fully depreciated, the SWMD will, on written demand by the City, send the City a termination statement that a security interest in the Project, or site improvements in the amount of funding provided by the SWMD is no longer claimed.
- 6. All other provisions of the Missouri Department of Natural Resources' Waste Management Program's General Terms and Conditions are to be incorporated into this agreement with the exception of I.N.3.c. which provides that the subgrantee must provide a lien on the real property.
- 7. **The security interest on the concrete glass recycling bunker will expire in five years beginning one year after the date the MOU is signed. As soon as the Agreement is signed by both parties the Agreement will become effective and remain in effect until the expiration of the security interest.**
- 8. This Agreement shall be governed by the laws of the State of Missouri.
- 9. All or any of this Agreement may be modified or amended by mutual written agreement of Advanced Disposal, the City and the SWMD and unless otherwise provided shall become effective upon signing by both parties.

IN WITNESS WHEREOF, the parties hereto have executed by signing and dating this Memorandum of Understanding as written above.

Signed Dated and Notarized by:

_____ Date _____
 Property Owner

Subscribed and sworn to before me on this _____ day of _____, _____. I am
(Day) (Month) (Year)
 commissioned as a notary public within the County of _____, State of _____
(Name of County)
 _____, and my commission expires on _____.
(Name of State)

_____ Date _____
 Signature of Notary

IN WITNESS WHEREOF, the parties hereto have executed by signing and dating this Memorandum of Understanding as written above.

Signed Dated and Notarized by:

Alan Wyatt, Chairman SWMD

Date

Subscribed and sworn to before me on this _____ day of _____, _____. I am
(Day) (Month) (Year)
commissioned as a notary public within the County of _____, State of
(Name of County)
_____, and my commission expires on _____.
(Name of State)

Signature of Notary

Date

IN WITNESS WHEREOF, the parties hereto have executed by signing and dating this Memorandum of Understanding as written above.

Signed Dated and Notarized by:

Concrete Glass Recycling Bunker
Subgrantee, City of Moberly

Date

Subscribed and sworn to before me on this _____ day of _____, _____. I am
(Day) (Month) (Year)
commissioned as a notary public within the County of _____, State of
(Name of County)
_____, and my commission expires on _____.
(Name of State)

Signature of Notary

Date

**Region G Mark Twain Solid Waste Management District
Financial Assistance Agreement**

This agreement is entered into under authority of and subject to pertinent legislation, regulations, and policies applicable to 260.200 through 260.335, RSMo.

Project Number: G2019-003

Project Name: City of Moberly Glass Recycling

Recipient: City of Moberly
101 W. Reed Street
Moberly, MO 65270
Phone: 660-269-7644 Email: tsanders@cityofmoberly.com
Authorized Official: Tom Sanders Project Manager: Tom Sanders

Effective Date's

Beginning Date:

Ending Date:

Source of Funding-Solid Waste Management Fund 0570

Funding:

Amount Requested: \$57,360.00 **Matching Funds:** \$14,340.00

Net Funding Amount: \$71,700.00

The recipient agrees to administer these funds in accordance with:

- a. All applicable federal and state laws and regulations including but not limited to 260.200 through 260.335, RSMo and 10 CSR 80-9.050.
- b. Project Title and Description (Attachment 1), Budget Form (Attachment 2), General Terms and Conditions (Attachment 3) and Special Terms and Conditions (Attachment 4).
- c. Purchasing activities will be conducted according to state regulations per Chapter 34, RSMo. and Office of Administration Division of Purchasing and Materials Management (Attachment 5).
- d. Department Public Information Guidelines (Attachment 6)
- e. The Solid Waste Management Program Guidance Document (Attachment 7)
- f. The Solid Waste Management Program Reimbursement Procedures (Attachment 8)
- g. Program Income must be reinvested in the district grant during the grant period per DNR SWMP General Terms and Conditions I.F.

Recipient acknowledges that 15% of funds must be retained until project is completed. If a grantee is late in submitting quarterly or final reports, the board may thru a formal written process suspend the grant and reduce the grant award. In the case of a grantee not submitting a grant report on time, staff will notify MDNR that the grant has been suspended and the grant award is being reduced for failure to comply with grant requirements.

The funding described herein is hereby offered and accepted effective upon signature of authorized officials.

**Mark Twain Solid Waste Management District
Executive Board**

Alan Wyatt

Chairman, Region G

Signature

Date

Grant Recipient

Print Name

Signature

Date

Moberly, MO

Moberly Sidewalk Improvements Project

Bid Tab

Date: 11/15/2019
 Bartlett & West Project No.: 19254.008
 TAP-4500(209)

MoDOT Item No.	Description	Quantity	Unit	Engineer's Estimate		Contech Engineering Solutions		Big R Bridge*	
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
	Base Bid								
703-99.02	Prefabricated Pedestrian Bridge Abutment Design	1	LS	5,000.00	\$5,000.00	2,200.00	\$2,200.00	2,100.00	\$2,100.00
703-99.03	Prefabricated Pedestrian Bridge	1	LS	30,000.00	\$30,000.00	33,440.00	\$33,440.00	28,500.00	\$28,500.00
	Base Bid Total				35,000.00		35,640.00		30,600.00

*Bidder was non-responsive
 (no bid bond or acknowledgement
 of addendum provided)

City of Moberly City Council Agenda Summary

Agenda Number: _____
Department: Utility and Finance
Date: November 18, 2019

Agenda Item: An Ordinance and Tax And Disclosure Compliance Procedure for the Equipment Lease Purchase Agreement with First State Community Bank.

Summary: Special Legal counsel to the city (Gilmore & Bell) have recommended to the city that we approve the lease purchase agreement with First State Community Bank and a Tax and Disclosure Compliance Procedure by way of the attached Ordinance. Staff has not previously presented the city council with the attached Tax and Disclosure Compliance Procedure which was provided to staff by Gilmore & Bell along with the Ordinance. The IRS imposes ongoing obligations related to the investment, use and expenditure of proceeds of a note intended to be a debt obligation of the city where interest is excludable from gross income for federal income tax purposes. Practically speaking this procedure identifies restricted funds and the expenditure of proceeds from those funds to insure that they are not used for a non-qualifying purpose which could jeopardize their tax-exempt status.

Gilmore & Bell recommends to the city and to First State Community Bank that the account for payment of our lease purchase obligations be initially funded with \$100,000.00. This is significant to make sure the financing is considered "issued" in the year 2019. A financing that allows draws from time to time like our agreement is not considered "issued" for tax purposes until at least \$50,001.00 has been advanced for project costs. The significance of being issued is for purposes of determining whether the city is entitled to avail itself of some tax provisions that exempt you from rebate but also allow the financing to be designated as bank qualified as the bank has requested in their proposal. Because the city may issue revenue bonds in 2020 it is important that this obligation be issued in 2019.

In addition, the city has several sizeable bills that need to be paid as soon as possible related to the energy services equipment being purchased and installed and that would be well in excess of the \$100,000.00 included in the lease agreement.

Recommended Action: Pass the Ordinance authorizing the execution of the Equipment Lease Purchase Agreement and the adoption of a Tax and Disclosure Compliance Procedure.

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
___ Memo	___ Council Minutes	Mayor		
___ Staff Report	<u>X</u> Proposed Ordinance	M___ S___ Jeffrey	___	___
___ Correspondence	___ Proposed Resolution	Council Member		
___ Bid Tabulation	___ Attorney's Report	M___ S___ Brubaker	___	___
___ P/C Recommendation	___ Petition	M___ S___ Kimmons	___	___
___ P/C Minutes	___ Contract	M___ S___ Davis	___	___
___ Application	___ Budget Amendment	M___ S___ Kyser	___	___
___ Citizen	___ Legal Notice			
___ Consultant Report	___ Other _____		Passed	Failed

BILL NO. _____

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING THE CITY OF MOBERLY, MISSOURI EQUIPMENT LEASE PURCHASE AGREEMENT AND AUTHORIZING AND APPROVING CERTAIN DOCUMENTS IN CONNECTION WITH THE DELIVERY OF THE LEASE.

WHEREAS, City of Moberly, Missouri (the “City”), desires to acquire and install certain energy services equipment (the “Project”) for the City; and

WHEREAS, the City Council finds and determines that it is advantageous and in the best interests of the City that the City enter into certain transactions with First State Community Bank (the “Bank”) relating to the delivery of the City of Moberly, Missouri Equipment Lease Purchase Agreement (the “Lease”) for the purpose of (1) paying the costs necessary to acquire, construct and install the Project and (2) paying the costs of delivering the Lease; and

WHEREAS, the City Council of the City further finds and determines that it is necessary and desirable in connection with the lease of the Project that the City enter into certain documents, and that the City take certain other actions and approve the execution of certain other documents as herein provided.

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

Section 1. Authorization of Documents. The City is hereby authorized to enter into the following documents (the “City Documents”) in substantially the forms filed in the records of the City, with such changes therein as shall be approved by the officers of the City executing such documents, such officers’ signatures thereon being conclusive evidence of their approval thereof:

- (a) Equipment Lease Purchase Agreement between the Bank and the City.
- (b) Account Control Agreement among the Bank (as lessor), the Bank (as deposit bank) and the City.

Section 2. Limited Obligations. The Lease and the interest with respect thereto shall be limited obligations, payable solely out of the rents, revenues and receipts received by the Bank from the City pursuant to the Lease. The Lease and the interest with respect thereto shall not constitute a debt or liability of the City, the State of Missouri or of any political subdivision thereof, and the Lease shall not constitute indebtedness, within the meaning of any constitutional or statutory debt limitation or restriction.

Section 3. Authorization, Approval and Execution of Tax and Disclosure Compliance Procedure. It is hereby found, determined and declared to be necessary and in the best interests of the City to authorize and approve the Tax and Disclosure Compliance Procedure for the Lease and other financial obligations issued by the City in the future.

Section 4. Execution of Documents. The City is hereby authorized to enter into, and the Mayor of the City and the City Clerk are hereby authorized and directed to execute and deliver, for and on

behalf of and as the act and deed of the City, the City Documents, and such other documents, certificates and instruments as may be necessary or desirable to carry out and comply with the intent of this Ordinance.

Section 5. Further Authority. The officers, agents and employees of the City, including the Mayor and the City Manager, shall be, and they hereby are, authorized and directed to execute all documents and take such actions as they may deem necessary or advisable in order to carry out and perform the purposes of this Ordinance, and to carry out, comply with and perform the duties of the City with respect to the City Documents, to make alterations, changes or additions in the foregoing agreements, statements, instruments and other documents herein approved, authorized and confirmed that they may approve, and the execution or taking of such action shall be conclusive evidence of such necessity or advisability.

Section 6. Effective Date. This Ordinance shall take effect and be in full force from and after its passage by the City Council and approval by the Mayor.

PASSED by the City Council, and **APPROVED** by the Mayor, of the City of Moberly, Missouri this ____ day of November, 2019.

Mayor

[SEAL]

ATTEST:

City Clerk

CITY OF MOBERLY, MISSOURI
TAX AND DISCLOSURE COMPLIANCE PROCEDURE
Approved November 18, 2019

TAX AND DISCLOSURE COMPLIANCE PROCEDURE

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Exhibit A – List of Obligations Covered by this Compliance Procedure

* * *

TAX AND DISCLOSURE COMPLIANCE PROCEDURE

ARTICLE I

DEFINITIONS

Section 1.1. Definitions. Capitalized words and terms used in this Compliance Procedure have the following meanings:

“**Annual Compliance Checklist**” means a questionnaire and/or checklist described in **Section 6.1** of this Compliance Procedure that is completed each year for the Obligations.

“**Annual Report**” means the Issuer’s audited financial statements (or unaudited financial statements as permitted by the Continuing Disclosure Undertaking) and certain other financial information and operating data required by the Continuing Disclosure Undertaking to be filed annually with the MSRB on EMMA.

“**Code**” means the Internal Revenue Code of 1986, as amended.

“**Compliance Officer**” means the Issuer’s Finance Director or, if the position of Finance Director is vacant, the person filling the responsibilities of the Finance Director for the Issuer.

“**Compliance Procedure**” means this Tax and Disclosure Compliance Procedure.

“**Continuing Disclosure Undertaking**” means the Continuing Disclosure Agreement(s), Continuing Disclosure Certificate(s), Continuing Disclosure Instruction(s) or other written certifications and agreements of the Issuer setting out covenants for satisfying the Issuer’s requirements for providing information to the MSRB pursuant to the Rule on an ongoing basis for one or more Obligations.

“**Cost**” or “**Costs**” means all costs and expenses paying for the acquisition, design, construction, equipping or improvement of a Project Facility or costs of issuing Obligations for a Project Facility.

“**Counsel**” means a law firm selected by the Issuer to provide a legal opinion regarding the tax status of interest on the Obligations as of the issue date or the law firm selected to advise the Issuer on matters referenced in this Compliance Procedure.

“**EMMA**” means the Electronic Municipal Market Access system for municipal securities disclosures established and maintained by the MSRB, which can be accessed at www.emma.msrb.org.

“**Final Written Allocation**” means the Final Written Allocation of Obligation proceeds prepared pursuant to **Section 5.4** of this Compliance Procedure.

“**Financed Assets**” means that part of a Project Facility treated as financed with Obligation proceeds as reflected in a Final Written Allocation or, if no Final Written Allocation was prepared, the accounting records of the Issuer and the Tax Compliance Agreement for the Obligations.

“**Governing Body**” means the City Council of the Issuer.

“Intent Resolution” means a resolution of the Issuer stating (1) the intent of the Issuer to finance all or a portion of the Project Facility, (2) the expected maximum size of the financing and (3) the intent of the Issuer to reimburse Costs of the Project Facility paid by the Issuer from proceeds of the Obligations.

“IRS” means the Internal Revenue Service.

“Issuer” means City of Moberly, Missouri.

“MSRB” means the Municipal Securities Rulemaking Board, or any successor repository designated as such by the Securities and Exchange Commission in accordance with the Rule.

“Obligations” means (a) any bond, note, installment sale agreement, lease or certificate intended to be a debt obligation of the Issuer or another political subdivision or government instrumentality, the proceeds of which are to be loaned or otherwise made available to the Issuer, and the interest on which is excludable from gross income for federal income tax purposes or is subject to other advantages, requirements or limitations of the Code and Regulations or any other United States laws related to taxation; and/or (b) any outstanding bond, note, installment sale agreement, lease or certificate in connection with the issuance of which the Issuer entered into or enters into a Continuing Disclosure Undertaking. A list of all Obligations outstanding or authorized and to be issued and subject to this Compliance Procedure is attached as **Exhibit A**.

“Placed In Service” means that date (as determined by the Compliance Officer) when the Project Facility is substantially complete and in operation at substantially its design level.

“Project Facility” means one or more facilities or capital projects, including land, building, equipment, or other property, financed in whole or in part with proceeds of an issue of Obligations and other sources of funds, if any, pursuant to the same plan of finance.

“Rebate Analyst” means the rebate analyst for the Obligations selected pursuant to the Tax Compliance Agreement.

“Regulations” means all regulations issued by the U.S. Treasury Department to implement the provisions of Code §§ 103 and 141 through 150 and applicable to Obligations.

“Restricted Funds” means the funds, accounts, and investments that are subject to arbitrage rebate and/or yield restriction rules that have been identified in the Tax Compliance Agreement for the Obligations.

“Rule” means Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934.

“Tax Compliance Agreement” means the Federal Tax Certificate, Tax Compliance Agreement, Arbitrage Certificate, or other written certification or agreement of the Issuer setting out representations and covenants for satisfying the post-issuance tax compliance requirements for the Obligations.

“Tax Compliance File” means documents and records, which may consist of paper and electronic medium, maintained for the Obligations. Each Tax Compliance File will include the following information if applicable:

- (a) Intent Resolution.
- (b) Transcript.
- (c) Final Written Allocation and/or all available accounting records related to the Project Facility showing expenditures allocated to the proceeds of the Obligations and expenditures (if any) allocated to other sources of funds.
- (d) All rebate and yield reduction payment calculations performed by the Rebate Analyst and all investment records provided to the Rebate Analyst for purposes of preparing the calculations.
- (e) Forms 8038-T together with proof of filing and payment of rebate.
- (f) Investment agreement bid documents (unless included in the Transcript) including:
 - (1) bid solicitation, bid responses, certificate of broker;
 - (2) written summary of reasons for deviations from the terms of the solicitation that are incorporated into the investment agreement; and
 - (3) copies of the investment agreement and any amendments.
- (g) Any item required to be maintained by the terms of the Tax Compliance Agreement involving the use of the Project Facility or expenditures related to tax compliance for the Obligations.
- (h) Any opinion of Counsel regarding the Obligations not included in the Transcript.
- (i) Amendments, modifications or substitute agreements to any agreement contained in the Transcript.
- (j) Any correspondence with the IRS relating to the Obligations including all correspondence relating to an audit by the IRS of the Obligations or any proceedings under the Voluntary Closing Agreement Program (VCAP).
- (k) Any available questionnaires or correspondence substantiating the use of the Project Facility in accordance with the terms of the Tax Compliance Agreement for the Obligations.
- (l) For refunding issues, the Tax Compliance File for the refunded Obligations.

“**Transcript**” means the “transcript of proceedings” or other similarly titled set of transaction documents assembled by Counsel following the issuance of the Obligations.

ARTICLE II

PURPOSE AND SCOPE

Section 2.1. Purpose of Compliance Procedure.

(a) Issuer’s Use of Obligations. The Issuer uses Obligations to fund Costs of a Project Facility. The Issuer understands that in exchange for the right to issue Obligations at favorable interest rates and terms, the Code and Regulations impose ongoing requirements related to the proceeds of the Obligations and the Project Facility financed by the Obligations. These requirements focus on the investment, use and expenditure of proceeds of the Obligations and related funds as well as restrictions on the use of the Project Facility.

(b) IRS Recommends Separate Written Procedures. The Issuer recognizes that the IRS has stated that all issuers of Obligations should have separate written procedures regarding ongoing compliance with the federal tax requirements for Obligations.

(c) **Continuing Disclosure Undertaking; Issuer Commitment.** The Issuer may be required under a Continuing Disclosure Undertaking to provide disclosures of certain financial information and operating data and to file notices of certain material events to the marketplace to facilitate informed secondary market trading in Obligations issued by the Issuer. The Issuer is committed to full compliance with the federal tax and securities law requirements for all of its outstanding and future tax-exempt financings. This Compliance Procedure is adopted by the Governing Body to comply with the IRS and Securities and Exchange Commission directives and to improve and promote tax and securities law compliance and documentation.

Section 2.2. Scope of Compliance Procedure; Conflicts. This Compliance Procedure applies to all Obligations currently outstanding and all Obligations issued in the future. If the provisions of this Compliance Procedure conflict with a Tax Compliance Agreement, Continuing Disclosure Undertaking or any other specific written instructions of Counsel, the terms of the Tax Compliance Agreement, Continuing Disclosure Undertaking or specific written instructions of Counsel will supersede and govern in lieu of this Compliance Procedure. Any exception to this Compliance Procedure required by Counsel as part of a future issue of tax-exempt Obligations will be incorporated in the Tax Compliance Agreement for the future issue. Any requirements imposed on the Issuer in the Tax Compliance Agreement will be noted by the Compliance Officer and incorporated into the Annual Compliance Checklist. The Issuer acknowledges that the Continuing Disclosure Undertaking may also apply to issues of taxable securities issued by the Issuer.

Section 2.3. Amendments and Publication of Compliance Procedure. This Compliance Procedure may be amended from time-to-time by the Governing Body. Copies of this Compliance Procedure and any amendments will be included in the permanent records of the Issuer.

ARTICLE III

COMPLIANCE OFFICER; TRAINING

Section 3.1. Compliance Officer Duties. The Compliance Officer is responsible for implementing this Compliance Procedure. The Compliance Officer will work with other employees that use the Project Facility to assist in implementing this Compliance Procedure. The Compliance Officer will consult with Counsel, other legal counsel to the Issuer, accountants, tax return preparers and other outside consultants to the extent necessary to carry out the purposes of this Compliance Procedure. The Compliance Officer will report to the Governing Body as necessary, and at least annually, regarding implementation of this Compliance Procedure and any recommended changes or amendments to this Compliance Procedure.

Section 3.2. Training. When appropriate, the Compliance Officer and/or other employees of the Issuer under the direction of the Compliance Officer will attend training programs offered by the IRS, the SEC, the MSRB, Counsel or other industry professionals regarding tax-exempt financing and securities law and disclosure requirements that are relevant to the Issuer. At the time the individual acting as the Compliance Officer passes the responsibilities for carrying out the provisions of this Compliance Procedure to another individual, the outgoing Compliance Officer is responsible for training the incoming individual acting as Compliance Officer to ensure the Issuer's continued compliance with the provisions of this Compliance Procedure and all Tax Compliance Agreements and Continuing Disclosure Undertakings for any outstanding Obligations.

ARTICLE IV

OBLIGATIONS CURRENTLY OUTSTANDING

Section 4.1. Obligations Covered by Article IV Procedures. This Article IV applies to all Obligations issued prior to the date of this Compliance Procedure that are currently outstanding. These Obligations are listed on **Exhibit A**.

Section 4.2. Tax Compliance File. As soon as practical, the Compliance Officer will attempt to assemble as much of the Tax Compliance File as is available for the Obligations listed on **Exhibit A**.

Section 4.3. Annual Compliance Checklists. As soon as practical following the adoption of this Compliance Procedure, the Compliance Officer will work with Counsel and/or other legal counsel to the Issuer and cause Annual Compliance Checklists to be completed for all outstanding Obligations and will follow the procedures specified in **Article VI** to complete the Annual Compliance Checklists and thereafter include each completed Annual Compliance Checklist in the Tax Compliance File.

Section 4.4. Correcting Prior Deficiencies in Compliance. In the event the Compliance Officer determines any deficiency in compliance with a Tax Compliance Agreement for an outstanding Obligation listed on **Exhibit A**, the Compliance Officer will follow the procedures described in the Regulations or the Voluntary Closing Agreement Program (VCAP) to remediate the noncompliance. If remediation of the noncompliance requires the Issuer to submit a request under VCAP, the Compliance Officer will undertake this step only after reporting the violation to the Governing Body and obtaining its approval.

ARTICLE V

COMPLIANCE PROCEDURE FOR NEW OBLIGATIONS

Section 5.1. Application. This Article V applies to Obligations issued on or after the date of this Compliance Procedure. See **Exhibit A** for a List of Obligations anticipated at the date of this Compliance Procedure.

Section 5.2. Prior to Issuance of Obligations.

(a) Intent Resolution. The Governing Body will authorize and approve the issuance of Obligations. Prior to or as a part of the authorizing resolution, order or ordinance, the Governing Body may adopt an Intent Resolution.

(b) Directions to Counsel. The Compliance Officer will provide a copy of this Compliance Procedure to Counsel with directions for Counsel to structure the documentation and procedural steps taken prior to issuing the Obligations so that they conform to the requirements of this Compliance Procedure, except to the extent Counsel determines that different procedures are required. The Compliance Officer will consult with Counsel so that appropriate provisions are made to fund or reimburse the Issuer's costs and expenses incurred to implement this Compliance Procedure.

(c) Tax Compliance Agreement. For each issuance of Obligations, a Tax Compliance Agreement will be executed by an officer of the Issuer. The Tax Compliance Agreement will (1) describe the Project Facility and the anticipated Financed Assets, (2) identify all Restricted Funds and provide for arbitrage and rebate compliance, (3) for new money financings, require a Final Written Allocation, and (4)

contain a form of the Annual Compliance Checklist for the Obligations. The Compliance Officer will confer with Counsel and the Issuer's counsel regarding the meaning and scope of each representation and covenant contained in the Tax Compliance Agreement.

(d) Preliminary Cost Allocations. For each issuance of Obligations, the Compliance Officer in consultation with Counsel, will prepare a preliminary cost allocation plan for the Project Facility. The preliminary cost allocation plan will identify the assets and expected costs for the Project Facility, and when necessary, will break-out the portions of Costs that are expected to be financed with proceeds of the Obligations (the "Financed Assets") and the portions, if any, expected to be financed from other sources.

(e) Tax Review with Counsel. Prior to the sale of Obligations, the Compliance Officer and Counsel will review this Compliance Procedure together with the draft Tax Compliance Agreement to ensure that any tax compliance issues in the new financing are adequately addressed by this Compliance Procedure and/or the Tax Compliance Agreement. If Counsel determines that this Compliance Procedure conflicts with the Tax Compliance Agreement, or must be supplemented to account for special issues or requirements for the Obligations, the Compliance Officer will ask Counsel to include the written modifications or additions in the final Tax Compliance Agreement. The Compliance Officer will request Counsel to prepare a form of Annual Compliance Checklist for use in monitoring the ongoing compliance requirements for the Obligations.

Section 5.3. Accounting and Recordkeeping.

(a) Accounting for New Money Projects. The Compliance Officer will be responsible for accounting for the investment and allocation of proceeds of the Obligations. The Compliance Officer will establish separate accounts or subaccounts to record expenditures for Costs of the Project Facility. Where appropriate, the Compliance Officer may use accounts established as part of the Issuer's financial records for this purpose. In recording Costs for the Project Facility, the Compliance Officer will ensure that the accounting system will include the following information: (1) identity of person or business paid, along with any other available narrative description of the purpose for the payment, (2) date of payment, (3) amount paid, and (4) invoice number or other identifying reference.

(b) Accounting for Refunded Obligations and Related Refunded Obligation Accounts. For Obligations that are issued to refund prior Obligations, the Tax Compliance Agreement will set out special accounting and allocation procedures for the proceeds of the financing, and if necessary proceeds of the refinanced Obligations.

(c) Tax Compliance File. The Compliance Officer will be responsible for assembling and maintaining the Tax Compliance File. The Annual Reports, other reports and notices of certain material events filed by the Issuer with the MSRB will be publicly available on EMMA and need not be separately maintained in the Tax Compliance File.

Section 5.4. Final Allocation of Obligation Proceeds.

(a) Preparation of Final Written Allocation; Timing. The Compliance Officer is responsible for making a written allocation of proceeds of Obligations to expenditures and identifying the Financed Assets. This process will be memorialized in the Final Written Allocation. For a new money financing, the Compliance Officer will commence this process as of the earliest of (1) the requisition of all Obligation proceeds from any segregated Obligation funded account, (2) the date the Project Facility has been substantially completed or (3) four and one-half years following the issue date of the Obligations. For Obligations issued only to refund a prior issue of Obligations, the Compliance Officer will work with

Counsel to prepare and/or document the Final Written Allocation for the Project Facility financed by the refunded Obligations and include it in the Tax Compliance Agreement.

(b) Contents and Procedure. The Compliance Officer will consult the Tax Compliance Agreement and, if necessary, contact Counsel to seek advice regarding any special allocation of Obligation proceeds and other money of the Issuer to the Costs of the Project Facility. If no special allocation is required or recommended, the Compliance Officer will allocate Costs of the Project Facility to the proceeds of the Obligations in accordance with the Issuer's accounting records. Each Final Written Allocation will contain the following: (1) a reconciliation of the actual sources and uses to Costs of the Project Facility, (2) the percentage of the cost of the Project Facility financed with proceeds of the Obligations (sale proceeds plus any investment earnings on those sale proceeds), (3) the Project Facility's Placed in Service date, (4) the estimated economic useful life of the Project Facility, and (5) any special procedures to be followed in completing the Annual Compliance Checklist (e.g., limiting the Annual Compliance Checklist to specific areas of the Project Facility that the Final Written Allocation or the Tax Compliance Agreement treats as having been financed by Obligations).

(c) Finalize Annual Compliance Checklist. As part of the preparation of the Final Written Allocation, the Compliance Officer will update the draft Annual Compliance Checklist contained in the relevant Tax Compliance Agreement. The Compliance Officer will include reminders for all subsequent arbitrage rebate computations required for the Obligations in the Annual Compliance Checklist.

(d) Review of Final Written Allocation and Annual Compliance Checklist. Each Final Written Allocation and Annual Compliance Checklist will be reviewed by legal counsel to the Issuer or Counsel for sufficiency and compliance with the Tax Compliance Agreement and this Compliance Procedure. Following the completion of the review, the Compliance Officer will execute the Final Written Allocation.

ARTICLE VI

ONGOING MONITORING PROCEDURES

Section 6.1. Annual Compliance Checklist. An Annual Compliance Checklist will be completed by the Compliance Officer each year. Each Annual Compliance Checklist will be designed and completed for the purpose of identifying potential noncompliance with the terms of the Tax Compliance Agreement, the Continuing Disclosure Undertaking or this Compliance Procedure and obtaining documents (such as investment records, arbitrage calculations, or other documentation for the Project Facility) that are required to be incorporated in the Tax Compliance File. The Compliance Officer will refer any responses indicating a violation of the terms of the Tax Compliance Agreement to legal counsel to the Issuer or Counsel and, if recommended by counsel, will follow the procedure set out in **Section 4.4** of this Compliance Procedure to remediate the noncompliance.

Section 6.2. Arbitrage and Rebate Compliance. The Compliance Officer will monitor the investment of Restricted Funds and provide investment records to the Rebate Analyst on a timely basis. The Compliance Officer will follow the directions of the Rebate Analyst with respect to the preparation of and the timing of rebate or yield reduction computations.

ARTICLE VII
CONTINUING DISCLOSURE

Section 7.1. Annual Disclosure Filings. For each issuance of Obligations, the Compliance Officer will review the Continuing Disclosure Undertaking, if any, to determine the financial information and operating data required to be included in the Annual Report to be filed by the Issuer with the MSRB on EMMA. The Compliance Officer will cause the Annual Report to be filed with the MSRB on EMMA within the time limits provided in the Continuing Disclosure Undertaking for the Obligations.

Section 7.2. Material Event Disclosure Filings. For each outstanding issue of Obligations, the Compliance Officer will review the Continuing Disclosure Undertaking to determine the “material events” that require prompt notice to be filed with the MSRB. Generally, the occurrence of any of the following events with respect to the Obligations represents a “material event”:

- (1) principal and interest payment delinquencies;
- (2) non-payment related defaults, if material;
- (3) unscheduled draws on debt service reserves reflecting financial difficulties;
- (4) unscheduled draws on credit enhancements reflecting financial difficulties;
- (5) substitution of credit or liquidity providers, or their failure to perform;
- (6) adverse tax opinions, the issuance by the IRS of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Obligations, or other material events affecting the tax status of the Obligations;
- (7) modifications to rights of bondholders, if material;
- (8) bond calls, if material, and tender offers;
- (9) defeasances;
- (10) release, substitution or sale of property securing repayment of the Obligations, if material;
- (11) rating changes;
- (12) bankruptcy, insolvency, receivership or similar event of the obligated person;
- (13) the consummation of a merger, consolidation, or acquisition involving the obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
- (14) appointment of a successor or additional trustee or the change of name of the trustee, if material;
- (15) incurrence of a Financial Obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect security holders, if material; and
- (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties.

For purposes of (15) and (16) above, the term “Financial Obligation” means a (a) debt obligation; (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (c) guarantee of (a) or (b) in this definition; provided however, the term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

After obtaining actual knowledge of the occurrence of any event that the Compliance Officer believes may constitute an event requiring disclosure, the Compliance Officer will contact Counsel to determine if notice of the event is required to be given to the MSRB under the Continuing Disclosure Undertaking. If it is determined that notice should be provided to the MSRB or is required to be provided to the MSRB by the Continuing Disclosure Undertaking, the Compliance Officer will cause the appropriate notice to be filed with the MSRB on EMMA within 10 business days after the occurrence of the event or as otherwise directed by Counsel.

ADOPTED BY THE CITY COUNCIL OF CITY OF MOBERLY, MISSOURI

November 18, 2019

EXHIBIT A

LIST OF OBLIGATIONS COVERED BY THIS COMPLIANCE PROCEDURE

Obligations Currently Outstanding (subject to Article IV)

- Combined Waterworks and Sewerage System Refunding Revenue Bonds Series 2004B
- Combined Waterworks and Sewerage System Revenue Bonds Series 2004C
- Combined Waterworks and Sewerage System Revenue Bonds Series 2006A
- Combined Waterworks and Sewerage System Revenue Bonds Series 2008A
- Certificates of Participation Series 2008

New Obligations (subject to Article V)

- Equipment Lease Purchase Agreement
- *All future issuances of Obligations*

Obligations Subject to Continuing Disclosure (subject to Article VII)

- None currently outstanding
- *All future issuances of Obligations with a Continuing Disclosure Undertaking*

City of Moberly City Council Agenda Summary

Agenda Number: _____

Department: City Manager

Date: November 18, 2019

Agenda Item: An Ordinance Approving A Cooperation Agreement For Coordinated Industrial Land Sales; And Providing Further Authority.

Summary: The portions of real property comprising the Moberly Industrial Park are currently held in fee by the City of Moberly (the “City”) and by the Moberly Holding Company (the “Company”), a Missouri non-profit corporation created to hold and dispose of property in support of area economic development activities and job creation efforts. As the Industrial Park has developed, disposition of ownership has become somewhat disjointed, giving rise to situations where potential end-users interested particular portions of the property must seek approval of each entity and must re-subdivide and combine holdings prior to development. This situation has led to confusion and unnecessary delay in the proper development of the Industrial Park. The City and the Company each wish to simplify and streamline this process and provide for a single point of decision governing combination and assembly of land for development by interested end-users. Missouri statutes authorize municipalities to cooperate by contract with any other municipality or political subdivision and with any private person, firm, association, or corporation for the planning, development, construction, acquisition, or operation of any public improvement or service, the subject and purposes of which are within the scope of the powers of such municipality. These statutes also provide that any such cooperative contract may also authorize the establishment of a “joint board” as a separate legal entity constituting a body corporate and politic to manage and have charge of such joint planning and development efforts and for the powers and duties, terms of office, and other provisions relating to the members of such joint board. To facilitate the coordinated and efficient sale and development of land within the Industrial Park, the City and the Company would enter into the attached Cooperative Agreement for Industrial Land Sales (the “Agreement”) which would establish such a joint board to supervise, manage and have charge of the sale and development of the aforesaid industrial lands. Through a grant of option from the City and the Company, the joint board would obtain the power to assemble, sell and convey to end-users land within the Industrial Park. Any such transaction would require prior notice to, but not necessarily approval of, the City Council. The Agreement would also establish the composition and terms of office of the joint board. The Agreement would extend for one year, subject to renewal by the City and the Company for successive one year terms

Recommended

Action: Approve this ordinance

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
___ Memo	___ Council Minutes	Mayor		
___ Staff Report	<u>X</u> Proposed Ordinance	M___ S___ Jeffrey	___	___
___ Correspondence	___ Proposed Resolution	Council Member		
___ Bid Tabulation	___ Attorney’s Report	M___ S___ Brubaker	___	___
___ P/C Recommendation	___ Petition	M___ S___ Kimmons	___	___
___ P/C Minutes	___ Contract	M___ S___ Davis	___	___
___ Application	___ Budget Amendment	M___ S___ Kyser	___	___
___ Citizen	___ Legal Notice			
___ Consultant Report	___ Other _____		Passed	Failed

BILL NO: _____

ORDINANCE NO: _____

AN ORDINANCE APPROVING A COOPERATION AGREEMENT FOR COORDINATED INDUSTRIAL LAND SALES; AND PROVIDING FURTHER AUTHORITY.

WHEREAS, the City of Moberly (the “**City**”) currently owns portions of the lands comprising the Moberly Industrial Park (the “**Industrial Park**”) and, to facilitate economic development activities and job creation within the City, wishes from time to time to offer portions of the aforesaid lands for sale to potential industrial end-users, all of which undertakings are within the scope of the powers of the City and which the Council of the City (the “**City Council**”) has found and determined are for a public purpose; and

WHEREAS, the Moberly Holding Company, a Missouri nonprofit, public benefit corporation (the “**Company**”), was organized to hold and dispose of real and personal property in support of area economic development activities and job creation efforts exclusively for the benefit, to lessen the burdens of, to perform the functions of, and to carry out the purposes of the political subdivisions within Randolph County and, in furtherance of the aforesaid corporate purposes, also currently owns a portion of the lands comprising the Industrial Park; and

WHEREAS, sections 70.210 through 70.320 of the Revised Statutes of Missouri, as amended, (the “**Act**”) authorize Missouri municipalities to contract with any private person, firm, association, or corporation for the planning, development, construction, acquisition, or operation of any public improvement or facility, or for a common service, provided, that the subject and purposes of any such contract or cooperative action are within the scope of the powers of such municipality; and

WHEREAS, section 70.260 of the Act further provides that such a cooperative contract may also authorize the establishment and selection of a joint board (a “**Joint Board**”) which shall be a separate legal entity and constitute a body corporate and politic to supervise, manage and have

charge of such joint planning, development, construction, acquisition, operation or service and for the powers and duties, terms of office, and other provisions relating to the members of such Joint Board; and

WHEREAS, the City and Company now wish to cooperate with one another and to provide for the coordinated and efficient sale and development the lands within the Industrial Park and, to facilitate such purposes, to establish a Joint Board to supervise, manage and have charge of the sale and development of the aforesaid industrial lands, to set forth the respective duties and obligations of and benefits to the City and the Company in connection therewith, and to establish the powers and duties, terms of office, and other provisions relating to the members of the Joint Board, all subject to and as provided in a certain Cooperation Agreement for Industrial Land Sales and Development (the “**Cooperation Agreement**”) in substantially the form attached as **Exhibit A** to and incorporated by reference in this Ordinance;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MOBERLY, MISSOURI, as follows, to wit:

SECTION 1. The Cooperation Agreement in substantially the form of Exhibit A to this Ordinance and the grants of option set forth therein are hereby approved and the Mayor is hereby authorized and directed to execute and deliver the Cooperation Agreement on behalf of the City.

SECTION 2. The Mayor, City Manager, City Clerk, and applicable City staff are hereby authorized and directed to take such further actions and to execute and deliver such further instruments as may be necessary or convenient to carry out and satisfy the City’s obligations under the Cooperation Agreement including, without limitation, proving such support to the Joint Board as may be reasonably necessary or convenient to carry out the functions and purposes of the Joint Board under the Cooperation Agreement.

SECTION 3. The portions of this Ordinance shall be severable. In the event that any

portion of this Ordinance is found by a court of competent jurisdiction to be invalid, the remaining portions of this Ordinance are valid, unless the court finds the valid portions of this Ordinance are so essential and inseparably connected with and dependent upon the void portion that it cannot be presumed that the Council of the City would have enacted the valid portions without the invalid ones, or unless the court finds that the valid portions standing alone are incomplete and are incapable of being executed in accordance with the legislative intent.

SECTION 4. This Ordinance shall take effect and be in force from and after its passage and adoption by the Council of the City and its signature by the officer presiding at the meeting at which it was passed and adopted.

PASSED AND ADOPTED by the Council of the City of Moberly, Missouri on this ____ day of _____, 2019.

Presiding Officer at Meeting

ATTEST:

Diane Kay Galloway, CMC/MRCC, City Clerk

EXHIBIT A
THE COOPERATION AGREEMENT

THIS COOPERATION AGREEMENT FOR INDUSTRIAL LAND SALES AND DEVELOPMENT (this “**Agreement**”) is made and entered into as of this _____ day of _____, 2019 by and between the CITY OF MOBERLY, a city of the third classification and Missouri municipal corporation located in Randolph County, Missouri, having a principal office at 101 West Reed Street, Moberly, Missouri 65270 (the “**City**”) and MOBERLY HOLDING COMPANY, a nonprofit, public benefit corporation organized and existing pursuant to Chapter 355 of the Revised Statutes of Missouri, as amended, having a principal office at 115 North Williams Street, Moberly, Missouri 65270 (the “**Company**”). *Capitalized terms used and not defined in this Agreement shall have the meanings respectively ascribed to them in Article I hereof.*

RECITALS

A. Sections 70.210 through 70.320 of the Revised Statutes of Missouri, as amended, authorize municipalities and other political subdivisions to cooperate by contract with any other municipality or political subdivision and with any private person, firm, association, or corporation for the planning, development, construction, acquisition, or operation of any public improvement or service, the subject and purposes of which are within the scope of the powers of such municipality or political subdivision.

B. Section 70.260 of the Revised Statutes of Missouri, as amended, further provides that such a cooperative contract may also authorize the establishment and selection of a joint board which shall be a separate legal entity and constitute a body corporate and politic to supervise, manage and have charge of such joint planning, development, construction, acquisition, operation or service and for the powers and duties, terms of office, and other provisions relating to the members of such joint board.

C. The City and the Company wish to cooperate with one another and to provide for the coordinated sale and development of certain industrial lands currently owned in fee by the respective entities all subject to the terms of and as set forth in this Agreement all of which undertakings are within the scope of the powers of the City and the City Council has found and determined that such undertakings are for a public purpose.

D. To facilitate the efficient sale and development of the aforesaid industrial lands, the City and the Company wish to establish pursuant to this Agreement the Joint Board to supervise, manage and have charge of the sale and development of the aforesaid industrial lands, to set forth the respective duties and obligations of and benefits to the respective entities in connection therewith, and to establish the powers and duties, terms of office, and other provisions relating to the members of the Joint Board, all as further set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the above premises and the mutual covenants and promises set forth in this Agreement, the City and the Company each hereby agrees as follows:

**ARTICLE I.
MEANINGS OF TERMS**

Section 1.1. Definitions. Except as otherwise defined, as used in this Agreement, the following capitalized words and terms shall have the following meanings:

“**Applicable Regulations**” shall mean, collectively, all federal, state and local laws, statutes, ordinances, rules, regulations, executive orders and codes applicable to or affecting the Industrial Lands.

“**Board of Directors**” shall mean the duly appointed and serving Board of Directors of the Company.

“**City Council**” shall mean the duly elected and serving governing body of the City.

“**City**” shall mean the City of Moberly, a Missouri municipal corporation and city of the third classification located in Randolph County, Missouri and having a principal office at 101 West Reed Street, Moberly, Missouri 65270.

“**Company**” shall mean Moberly Holding Company, a nonprofit, public benefit corporation organized and existing pursuant to Chapter 355 of the Revised Statutes of Missouri, as amended, having a principal office at 115 North Williams Street, Moberly, Missouri 65270.

“**Effective Date**” shall mean the date first entered above.

“**Industrial Lands**” shall mean, collectively, Lot 1 and Lots 3 through 12, inclusive, of the Moberly Area Industrial Park, together with such ways, rights of way, and utility corridors serving such Lots, all as depicted on **Exhibit A**, attached to and incorporated by reference in this Agreement, currently owned in fee by the City or by the Company.

“**Joint Board**” shall mean the joint board created pursuant to section 70.260 of the Revised Statutes of Missouri, as amended, and **Section 2.2** of this Agreement.

“**Option(s)**” shall mean the exclusive, irrevocable options to purchase all or any portion of the Industrial Lands at any time and from time to time granted by the City and by the Company over the portions of the Industrial Lands respectively owned them to the Joint Board as further provided in **Section 3.1** of this Agreement.

“**Optioned Property**” shall mean any portion of the Industrial Lands on which a notice of exercise of Option has been delivered in accordance with **Section 3.2** of this Agreement.

Section 1.2. Rules of Construction. Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neuter genders. Unless the context shall otherwise indicate, the words importing the singular number shall include the plural and vice versa, and words importing person shall include firms, associations and corporations, including public bodies, as well as natural persons.

Section 1.3. Computation of Time. Wherever this Agreement calls for the performance of any act by reference to a day or number of days, to a month or number of months or to a year or number of years, each such computation shall be made based upon calendar days, calendar months, and calendar years, as applicable, unless otherwise expressly provided.

**ARTICLE II.
PURPOSE; ESTABLISHMENT OF JOINT BOARD**

Section 2.1. Limited Purpose; Intent. The purposes of this Agreement and the undertakings and transactions specified and contemplated herein are limited to those activities necessary or convenient to undertake coordinated sales and development of the Industrial Lands including partitioning, subdivision, and re-subdivision from time to time of the parcels constituting the Industrial Lands or portions thereof; the obtaining from the City and the Company, as applicable, purchase options for the Industrial Lands or portions thereof exercisable from time to time and assignable to third party developers, installation from time to time of such ways, utilities and utility corridors as may be necessary to serve all or portions of the Industrial Lands, all to facilitate the management, offering for sale, sale, and development for job creating industrial and related purposes of all or portions of the Industrial Lands. The City and the Company intend that this Agreement shall constitute a contractual joint venture as contemplated in section 70.260 of the Revised Statutes of Missouri, as amended, and nothing in this Agreement shall be deemed to be or give rise to a partnership between the City and the Company. The City and the Company may provide services on an arm's length basis to one another or to the Joint Board while remaining independent entities and, with respect to the undertakings set forth in this Agreement, the City and the Company shall each remain responsible for their own actions and neither shall be the agent of the other.

Section 2.2. Joint Board Established. There is hereby established as a separate legal entity and a body corporate and politic the Joint Board which shall have sole responsibility for and charge of the management of the Industrial Lands and all activities involved in the coordinated sales and development of the Industrial Lands including, without limitation, the activities specified in **Section 2.1** of this Agreement. The Joint Board shall have all of the powers set forth in section 70.260.2 of the Revised Statutes of Missouri including, without limitation, all powers reasonably necessary to the exercise of its function under this Agreement. The Joint Board shall consist at all times of three (3) persons who shall be: (i) a person appointed by the City Council in its sole discretion; (ii) the duly appointed and serving City Manager of the City; and (iii) the duly appointed and serving President of the Moberly Area Economic Development Corporation, each of whom shall serve without compensation.

**ARTICLE III.
PURCHASE OPTIONS; DUE DILIGENCE; SUBDIVISION**

Section 3.1. Grant of Options; Assignability; Term. The City and the Company each hereby grants to the Joint Board and the Joint Board hereby accepts from the City and from the Company the exclusive and irrevocable right and option to purchase all or any portion of the Industrial Lands owned in fee by the City or by the Company. The grants of option shall commence on the date of execution of this Agreement and may be exercised by the Joint Board at any time and from time to time. The Joint Board shall have the further right to assign at any

time and from time to time in the Joint Board's sole discretion any portion of the options granted in this Section 3.1 to one or more third party end-user for industrial or similar job creating uses designated by the Joint Board in the Joint Board's sole and unfettered discretion; *provided that* prior to any exercise or assignment of any option granted hereby or portion thereof, the Joint Board shall notify the City Council in writing at least five (5) business days prior to the effective date of any such exercise or assignment; *provided, however, that* the consent of the City Council shall not act or be deemed to act as a pre-condition to any such exercise or assignment. This Agreement shall continue for a period of one (1) year from the Effective Date and may be renewed from year to year in each case for an additional one (1) year period; *provided that*, in any event, this Agreement shall terminate on the exercise of the Option on the last acre of the Industrial Land remaining undeveloped and upon any such termination and thereafter the Joint Board shall have no further rights or obligations under this Agreement.

Section 3.2. Exercise of Options; Right to Determine Purchase Price. The Option shall be exercised by the Joint Board by delivering written notice thereof to the City or the Company, as applicable, identifying any assignee (which upon written request of the Joint Board such identification shall be kept at all times confidential by the City and the Company and not disclosed to any third party) and setting forth a date for closing on the purchaser and sale of the Optioned Property pursuant to the terms of this Agreement. The exercise of the Option shall be effective on the date written notice is deemed effective pursuant to Section 5.3 of this Agreement. In connection with the purchase and sale of any portion of the Industrial Lands under this Agreement, the Joint Board shall have the sole authority to negotiate and determine the purchase price for the applicable Optioned Property which purchase price in each case may (but need not be required to) represent the amount of the appraised value of the applicable Optioned Property as determined by an independent licensed commercial property appraiser or firm selected by the Joint Board and to further determine the date and terms of closing with respect to such Optioned Property, all of which shall be set forth in the written notice exercising the Option. At each such closing, the City or the Company or both of them, as applicable, shall deliver title and full possession of the Optioned Property free of all tenants and occupants; *provided that* neither the City nor the Company shall have any monetary obligation to the Joint Board or to any assignee thereof or other third party respecting closing costs, tax or other prorations, or other associated fees, charges or expenses. Any gains or losses to the City or the Company as a result of such sale shall be allocated and apportioned in accordance with Article IV of this Agreement.

Section 3.3. Due Diligence; Access to Optioned Property. At any time or from time to time during the term of this Agreement, the Joint Board or a potential assignee designated in writing by the Joint Board may take the following actions with respect to an Optioned Property, all of which shall be at the sole cost and expense of the Joint Board or the assignee so designated, as applicable.

- (a) Obtain and review a commitment for title insurance with respect to such Optioned Property;
- (b) Obtain and review a survey of such Optioned Property prepared by a licensed Missouri land surveyor; and
- (c) Obtain such satisfactory inspections as the Joint Board or assignee(s) may deem

necessary or appropriate, specifically including, without limitation environmental hazard assessment and feasibility study. The Joint Board or any designated assignee or their agents are granted permission by the City and By the Company to come upon an Optioned Property at any reasonable time and from time to time for the purpose of conducting the activities described in this Section 3.3 at the sole cost, expense, and risk of the Joint Board or assignee, as applicable. Any such entry onto an Optioned Property shall occur during normal business hours, after giving the City or the Company, as applicable reasonable advance notice and shall be conducted in a manner so as not to interfere with lawful activities on and use of the Industrial Land or such Optioned Property. The Joint Board or assignee, as applicable, shall repair any damage to such Optioned Property caused by any such inspections and in no event shall unreasonably invasive testing be conducted at or on an Optioned Property.

Section 3.4. Subdivision Rights. The Joint Board shall have the further right, but not the obligation, to cause to be replatted, subdivided, and re-subdivided the Industrial Lands or any portions thereof at any time and from time to time as may be deemed necessary or convenient by and at the sole cost and expense of the Joint Board. In each such event, the City and the Company each agree to cooperate in good faith with the Joint Board, to with consent to such subdivision or re-subdivision and to execute such instruments as may reasonably be required to effectuate each such replatting, subdivision, or re-subdivision.

ARTICLE IV. ALLOCATION OF GAINS AND LOSSES

Section 4.1. Apportionment of Gains and Losses. In connection with any sale of an Optioned Property from time to time consummated pursuant to this Agreement, the City, the Company and the Joint Board mutually agree that any resultant sale proceeds shall, after deducting reasonable out of pocket expenses of the Joint Board, be distributed to the City and the Company pro rata based on proportionate area of [such Optioned Property/the total then-unsold portion of the Industrial Lands] owned in fee respectively by the City and the Company. In the event that such sale proceeds are less than the total original purchase price paid by the City or by the Company originally acquiring fee title in such Optioned Property the sale proceeds shall be distributed to the City and the Company based on the proportionate share of the combined original purchase price paid by the City and the Company. This allocation is illustrated by the following example:

City's original purchase price of City portion of Optioned Property = \$15,000
Company's original purchase price of Company's portion of Optioned Property = \$10,000

City's proportionate share of total original purchase price of Optioned Property = 60%

Company's proportionate share of total original purchase price of Optioned Property = 40%

Optioned Property current sale price = \$20,000; a resultant \$5,000 loss (Total original purchase price of \$25,000 minus current sale price of \$20,000 = \$5,000)

Applicable apportionment of \$20,000 current sale proceeds = \$12,000 (60%) to

City; \$8,000 (40%) to Company, notwithstanding respective acreage ownerships.

Section 4.2. Joint Board Expenses. The parties to this Agreement each agree that Joint Board shall be entitled to reimbursements from net sale proceeds prior to any distributions under Section 4.1 of this Agreement for any and all reasonable out of pocket expenses or amounts incurred advanced by or on behalf of the Joint Board in connection with the sale of any Optioned Property.

ARTICLE V. MISCELLANEOUS PROVISIONS

Section 5.1. Representations of the Parties. The parties to this Agreement each hereby represents and warrants to the other party and to the Joint Board as follows:

(a) The execution and delivery of this Agreement by such party will not conflict with or result in a breach of any of the terms of, or constitute a default under, any indenture, mortgage, deed of trust, lease or other agreement or instrument to which such party or any parent, affiliate or principal of such party is a party or by which such party or any parent, affiliate or principal of such party is bound or any applicable articles of organization, or operating agreement, or any of the rules or regulations of any governmental authority applicable to such party or any parent, affiliate or principal of such party;

(b) Each such party has full power and authority to execute and deliver and perform the terms and obligations of this Agreement. Each party has been authorized by all necessary action to execute and deliver this Agreement, which shall constitute the legal, valid and binding obligation of such party, enforceable in accordance with its terms, subject to applicable laws affecting cities, bankruptcy and other laws affecting creditors' rights generally and to general principles of equity; and

(c) There are no actions or proceedings by or before any court, governmental commission, board, bureau, or any other administrative agency pending, threatened, or affecting any party that would impair that party's ability to perform under this Agreement; and

(d) The City and the Company each further represent and warrant to each other and to the Joint Board that while this Agreement is in effect: (i) neither the City nor the Company shall enter into any agreements affecting any portion of the Industrial Lands or an Optioned Property or any portion thereof without the prior written consent of the Joint Board and the other party; and (ii) neither the City nor the Company Seller shall enter into any agreement or lease with or grant any option or right to any person or entity other than the Joint Board Purchaser with respect to the sale, transfer or conveyance of the Industrial Lands, an Optioned Property, or any portion thereof.

Section 5.2. Remedies; Specific Performance Available. The parties to this Agreement may, either in law or equity, by suit, action, mandamus or other proceedings in court, seek declaratory relief, enforce and compel specific performance of this Agreement or any portion thereof.

Section 5.3. Notices. Whenever notice or other communication is called for in this Agreement to be given or is otherwise given, such notice shall be in writing addressed to the addressees at the addresses set forth below, and transmitted by any of the following means: (a) personal service; (b) overnight courier; or (c) registered or certified United States mail, return receipt requested:

If to the City: City of Moberly
101 West Reed Street - City Hall
Moberly, Missouri 65270
Attention: City Manager

If to the Company: Moberly Holding Company
115 North Williams Street
Moberly, Missouri 65270
Attention: President

If to the Joint Board: Joint Board of Control
c/o City of Moberly
101 West Reed Street
Moberly, Missouri 65270
Attention: Moberly City Manager

or to such other persons as the parties may designate in writing from time to time in accordance with this Section 5.3 and all said notices shall be deemed given, as applicable, (a) upon hand delivery, (b) upon deposit with an overnight courier, or (c) upon deposit in the United States mail.

Section 5.4. Further Assistance. The parties to this Agreement each agree to take such actions and execute such documents and instruments including, without limitation, the execution and recording in the office of the Randolph County Recorder of deeds, a memorandum of this Agreement setting forth the terms of the Options granted hereby and other property rights documents consistent with the parties' obligations under this Agreement, and all as may be reasonably necessary or appropriate to carry out the terms, provisions and intent of this Agreement and to aid and assist each other in carrying out said terms, provisions and intent.

Section 5.5. Severability. The provisions of this Agreement shall be deemed severable. If any word, phrase, term, sentence, paragraph, or other portion of this Agreement shall, at any time or to any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected by such partial invalidity, and each remaining word, phrase, term, sentence, paragraph covenant, or other portion of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

Section 5.6. Headings; No Presumption; Agreement Preparation. The headings and captions of this Agreement are for convenience and reference only, and in no way define, limit, or describe the scope or intent of this Agreement of any provision thereof and shall in no way be deemed to explain, modify, amplify or aid in the interpretation or construction of the provisions of this Agreement. Each party to this Agreement and their attorneys have had full opportunity to review and participate in the drafting of the final form of this Agreement and all

documents attached as exhibits. This Agreement shall be construed without regard to any presumption or other rule of construction whereby ambiguities within this Agreement or such other document would be construed or interpreted against the party causing the document to be drafted. The parties hereto each further represent that the terms of this Agreement and the documents attached as exhibits hereto have been completely read by them and that those terms are fully understood and voluntarily accepted by them. In any interpretation, construction or determination of the meaning of any provision of this Agreement, no presumption whatsoever shall arise from the fact that the Agreement was prepared by or on behalf of any party hereto.

Section 5.7. Choice of Law; Venue; Waiver of Objections. This Agreement and its performance shall be deemed to have been fully executed, made by the parties in, and governed by and construed in accordance with the laws of the State of Missouri applicable to contracts made and to be performed wholly within such state, without regard to choice or conflict of laws provisions. The parties hereto each agree that any action at law, suit in equity, or other judicial proceeding arising out of this Agreement shall be instituted only in the Circuit Court of Randolph County, Missouri or in federal court of the Eastern District of Missouri and waive any objection based upon venue or *forum non conveniens* or otherwise.

Section 5.8. Entire Agreement; Amendments; No Waiver by Prior Actions. The parties hereto agree that this Agreement shall constitute the entire agreement among the parties and no other agreements or representations other than those contained in this Agreement have been made by the parties. This Agreement shall be amended only in writing and effective when signed by the duly authorized agents of the parties and of the Joint Board. The failure of any party hereto to insist in any one or more cases upon the strict performance of any term, covenant or condition of this Agreement to be performed or observed by another party shall not constitute a waiver or relinquishment for the future of any such term, covenant or condition.

Section 5.9. No Waiver of Sovereign Immunity; No Personal Liability. Nothing in this Agreement shall be construed or deemed to constitute a waiver of the City's sovereign immunity. No official, officer, agent, attorney, employee, or representative of the City, the Company or the Joint Board shall be personally liable to any other party or the assignees, sublessees, successors, assigns, heirs or personal representatives of such party in the event of any default or breach by any party under this Agreement, or for any amount which may become due to any party or on any obligations under the terms of this Agreement.

Section 5.10. Relationship of the Parties; No Third Party Beneficiaries. Nothing contained in this Agreement nor any act of any party shall be deemed or construed to create a partnership or agency relationship among the parties or between any party and any other party or the Joint Board or their agents or representatives and this Agreement is and shall be limited to the specific purposes set out herein. Other than as expressly provided in this Agreement, no party shall be the agent of, or have any rights to create any obligations or liabilities binding on, any other party. The parties do not intend to confer any benefit under this Agreement on any person or entity other than the Joint Board and the named parties hereto.

Section 5.11. Binding Effect. Except as otherwise expressly provided in this Agreement, the covenants, conditions and agreements contained in this Agreement shall bind and inure to the benefit of the named parties hereto and the Joint Board and their respective successors and permitted assigns.

Section 5.12. Assignment Limited. Other than the permitted assignments provided for under Article III of this Agreement, this Agreement may not be assigned in whole or in part by any party without prior written consent of each of the other parties.

Section 5.13. Execution; Counterparts. Each person executing this Agreement in a representative capacity warrants and represents that he or she has authority to do so, and upon request by another party, proof of such authority will be furnished to the requesting party. This Agreement may be executed at different times and in two or more counterparts, and all counterparts so executed shall for all purposes constitute one and the same instrument, binding on the parties hereto, notwithstanding that all of the parties may not have executed the same counterpart. In proving this Agreement, it shall not be necessary to produce or account for more than one such counterpart executed by the party against whom enforcement is sought.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

CITY OF MOBERLY
(the “City”)

By: _____
Jerry Jeffrey, Mayor

ATTEST:

D. K. Galloway, CMC/MRCC, City Clerk

MOBERLY HOLDING COMPANY
(the “Company”)

By: _____
Printed name: _____
Title: _____

ATTEST:

STATE OF MISSOURI)
) SS.
COUNTY OF RANDOLPH)

On this ____ day of _____, 2019, before me appeared _____, to me personally known, who being by me duly sworn, did say that he/she is the _____ of MOBERLY HOLDING COMPANY, a nonprofit, public benefit corporation organized and existing pursuant to Chapter 355 of the Revised Statutes of Missouri, as amended, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors and said officer acknowledged said instrument to be the free act and deed of said corporation.

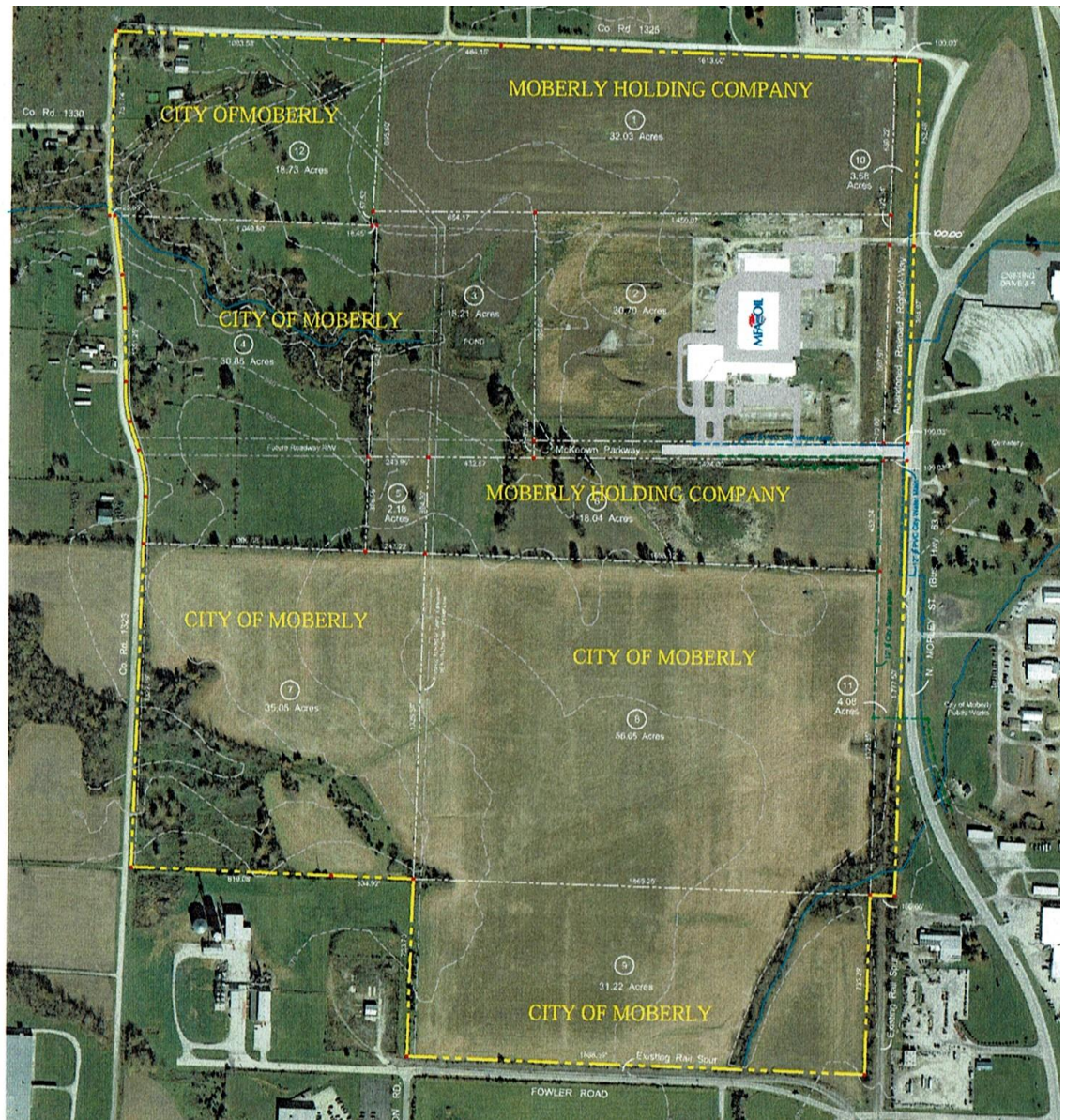
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year first above written.

Notary Public

My commission expires:

Exhibit A

The Industrial Lands



Lot - 1	32.03 Acres	"Available"
Lot - 2	30.70 Acres	SOLD - MFA Oil
Lot - 3	15.21 Acres	"Available"
Lot - 4	30.85 Acres	"Available"
Lot - 5	2.18 Acres	"Available"
Lot - 6	18.04 Acres	"Available"
Lot - 7	35.05 Acres	"Available"
Lot - 8	56.65 Acres	"Available"
Lot - 9	31.22 Acres	"Available"
Lot - 10	3.58 Acres	"Available"
Lot - 11	4.08 Acres	"Available"
Lot - 12	18.73 Acres	"Available"
278.32 Acres		TOTAL

COOPERATION AGREEMENT FOR INDUSTRIAL LAND SALES AND DEVELOPMENT

THIS COOPERATION AGREEMENT FOR INDUSTRIAL LAND SALES AND DEVELOPMENT (this “**Agreement**”) is made and entered into as of this _____ day of _____, 2019 by and between the CITY OF MOBERLY, a city of the third classification and Missouri municipal corporation located in Randolph County, Missouri, having a principal office at 101 West Reed Street, Moberly, Missouri 65270 (the “**City**”) and MOBERLY HOLDING COMPANY, a nonprofit, public benefit corporation organized and existing pursuant to Chapter 355 of the Revised Statutes of Missouri, as amended, having a principal office at 115 North Williams Street, Moberly, Missouri 65270 (the “**Company**”). *Capitalized terms used and not defined in this Agreement shall have the meanings respectively ascribed to them in Article I hereof.*

RECITALS

A. Sections 70.210 through 70.320 of the Revised Statutes of Missouri, as amended, authorize municipalities and other political subdivisions to cooperate by contract with any other municipality or political subdivision and with any private person, firm, association, or corporation for the planning, development, construction, acquisition, or operation of any public improvement or service, the subject and purposes of which are within the scope of the powers of such municipality or political subdivision.

B. Section 70.260 of the Revised Statutes of Missouri, as amended, further provides that such a cooperative contract may also authorize the establishment and selection of a joint board which shall be a separate legal entity and constitute a body corporate and politic to supervise, manage and have charge of such joint planning, development, construction, acquisition, operation or service and for the powers and duties, terms of office, and other provisions relating to the members of such joint board.

C. The City and the Company wish to cooperate with one another and to provide for the coordinated sale and development of certain industrial lands currently owned in fee by the respective entities all subject to the terms of and as set forth in this Agreement all of which undertakings are within the scope of the powers of the City and the City Council has found and determined that such undertakings are for a public purpose.

D. To facilitate the efficient sale and development of the aforesaid industrial lands, the City and the Company wish to establish pursuant to this Agreement the Joint Board to supervise, manage and have charge of the sale and development of the aforesaid industrial lands, to set forth the respective duties and obligations of and benefits to the respective entities in connection

therewith, and to establish the powers and duties, terms of office, and other provisions relating to the members of the Joint Board, all as further set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the above premises and the mutual covenants and promises set forth in this Agreement, the City and the Company each hereby agrees as follows:

ARTICLE I. MEANINGS OF TERMS

Section 1.1. Definitions. Except as otherwise defined, as used in this Agreement, the following capitalized words and terms shall have the following meanings:

“**Applicable Regulations**” shall mean, collectively, all federal, state and local laws, statutes, ordinances, rules, regulations, executive orders and codes applicable to or affecting the Industrial Lands.

“**Board of Directors**” shall mean the duly appointed and serving Board of Directors of the Company.

“**City Council**” shall mean the duly elected and serving governing body of the City.

“**City**” shall mean the City of Moberly, a Missouri municipal corporation and city of the third classification located in Randolph County, Missouri and having a principal office at 101 West Reed Street, Moberly, Missouri 65270.

“**Company**” shall mean Moberly Holding Company, a nonprofit, public benefit corporation organized and existing pursuant to Chapter 355 of the Revised Statutes of Missouri, as amended, having a principal office at 115 North Williams Street, Moberly, Missouri 65270.

“**Effective Date**” shall mean the date first entered above.

“**Industrial Lands**” shall mean, collectively, Lot 1 and Lots 3 through 12, inclusive, of the Moberly Area Industrial Park, together with such ways, rights of way, and utility corridors serving such Lots, all as depicted on **Exhibit A**, attached to and incorporated by reference in this Agreement, currently owned in fee by the City or by the Company.

“**Joint Board**” shall mean the joint board created pursuant to section 70.260 of the Revised Statutes of Missouri, as amended, and **Section 2.2** of this Agreement.

“**Option(s)**” shall mean the exclusive, irrevocable options to purchase all or any portion of the Industrial Lands at any time and from time to time granted by the City and by the Company

over the portions of the Industrial Lands respectively owned them to the Joint Board as further provided in Section 3.1 of this Agreement.

“**Optioned Property**” shall mean any portion of the Industrial Lands on which a notice of exercise of Option has been delivered in accordance with Section 3.2 of this Agreement.

Section 1.2. Rules of Construction. Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neuter genders. Unless the context shall otherwise indicate, the words importing the singular number shall include the plural and vice versa, and words importing person shall include firms, associations and corporations, including public bodies, as well as natural persons.

Section 1.3. Computation of Time. Wherever this Agreement calls for the performance of any act by reference to a day or number of days, to a month or number of months or to a year or number of years, each such computation shall be made based upon calendar days, calendar months, and calendar years, as applicable, unless otherwise expressly provided.

ARTICLE II. PURPOSE; ESTABLISHMENT OF JOINT BOARD

Section 2.1. Limited Purpose; Intent. The purposes of this Agreement and the undertakings and transactions specified and contemplated herein are limited to those activities necessary or convenient to undertake coordinated sales and development of the Industrial Lands including partitioning, subdivision, and re-subdivision from time to time of the parcels constituting the Industrial Lands or portions thereof; the obtaining from the City and the Company, as applicable, purchase options for the Industrial Lands or portions thereof exercisable from time to time and assignable to third party developers, installation from time to time of such ways, utilities and utility corridors as may be necessary to serve all or portions of the Industrial Lands, all to facilitate the management, offering for sale, sale, and development for job creating industrial and related purposes of all or portions of the Industrial Lands. The City and the Company intend that this Agreement shall constitute a contractual joint venture as contemplated in section 70.260 of the Revised Statutes of Missouri, as amended, and nothing in this Agreement shall be deemed to be or give rise to a partnership between the City and the Company. The City and the Company may provide services on an arm’s length basis to one another or to the Joint Board while remaining independent entities and, with respect to the undertakings set forth in this Agreement, the City and the Company shall each remain responsible for their own actions and neither shall be the agent of the other.

Section 2.2. Joint Board Established. There is hereby established as a separate legal entity and a body corporate and politic the Joint Board which shall have sole responsibility for and charge of the management of the Industrial Lands and all activities involved in the coordinated sales and development of the Industrial Lands including, without limitation, the activities specified in Section 2.1 of this Agreement. The Joint Board shall have all of the powers set forth in section 70.260.2 of the Revised Statutes of Missouri including, without limitation, all powers reasonably necessary to the exercise of its function under this Agreement. The Joint Board shall consist at all times of

three (3) persons who shall be: (i) a person appointed by the City Council in its sole discretion; (ii) the duly appointed and serving City Manager of the City; and (iii) the duly appointed and serving President of the Moberly Area Economic Development Corporation, each of whom shall serve without compensation.

**ARTICLE III.
PURCHASE OPTIONS; DUE DILIGENCE; SUBDIVISION**

Section 3.1. Grant of Options; Assignability; Term. The City and the Company each hereby grants to the Joint Board and the Joint Board hereby accepts from the City and from the Company the exclusive and irrevocable right and option to purchase all or any portion of the Industrial Lands owned in fee by the City or by the Company. The grants of option shall commence on the date of execution of this Agreement and may be exercised by the Joint Board at any time and from time to time. The Joint Board shall have the further right to assign at any time and from time to time in the Joint Board's sole discretion any portion of the options granted in this Section 3.1 to one or more third party end-user for industrial or similar job creating uses designated by the Joint Board in the Joint Board's sole and unfettered discretion; *provided that* prior to any exercise or assignment of any option granted hereby or portion thereof, the Joint Board shall notify the City Council in writing at least five (5) business days prior to the effective date of any such exercise or assignment; *provided, however, that* the consent of the City Council shall not act or be deemed to act as a pre-condition to any such exercise or assignment. This Agreement shall continue for a period of one (1) year from the Effective Date and may be renewed from year to year in each case for an additional one (1) year period; *provided that*, in any event, this Agreement shall terminate on the exercise of the Option on the last acre of the Industrial Land remaining undeveloped and upon any such termination and thereafter the Joint Board shall have no further rights or obligations under this Agreement.

Section 3.2. Exercise of Options; Right to Determine Purchase Price. The Option shall be exercised by the Joint Board by delivering written notice thereof to the City or the Company, as applicable, identifying any assignee (which upon written request of the Joint Board such identification shall be kept at all times confidential by the City and the Company and not disclosed to any third party) and setting forth a date for closing on the purchaser and sale of the Optioned Property pursuant to the terms of this Agreement. The exercise of the Option shall be effective on the date written notice is deemed effective pursuant to Section 5.3 of this Agreement. In connection with the purchase and sale of any portion of the Industrial Lands under this Agreement, the Joint Board shall have the sole authority to negotiate and determine the purchase price for the applicable Optioned Property which purchase price in each case may (but need not be required to) represent the amount of the appraised value of the applicable Optioned Property as determined by an independent licensed commercial property appraiser or firm selected by the Joint Board and to further determine the date and terms of closing with respect to such Optioned Property, all of which shall be set forth in the written notice exercising the Option. At each such closing, the City or the Company or both of them, as applicable, shall deliver title and full possession of the Optioned Property free of all tenants and occupants; *provided that* neither the City nor the Company shall have any monetary obligation to the Joint Board or to any assignee thereof or other third party

respecting closing costs, tax or other prorations, or other associated fees, charges or expenses. Any gains or losses to the City or the Company as a result of such sale shall be allocated and apportioned in accordance with Article IV of this Agreement.

Section 3.3. Due Diligence; Access to Optioned Property. At any time or from time to time during the term of this Agreement, the Joint Board or a potential assignee designated in writing by the Joint Board may take the following actions with respect to an Optioned Property, all of which shall be at the sole cost and expense of the Joint Board or the assignee so designated, as applicable.

(a) Obtain and review a commitment for title insurance with respect to such Optioned Property;

(b) Obtain and review a survey of such Optioned Property prepared by a licensed Missouri land surveyor; and

(c) Obtain such satisfactory inspections as the Joint Board or assignee(s) may deem necessary or appropriate, specifically including, without limitation environmental hazard assessment and feasibility study. The Joint Board or any designated assignee or their agents are granted permission by the City and By the Company to come upon an Optioned Property at any reasonable time and from time to time for the purpose of conducting the activities described in this Section 3.3 at the sole cost, expense, and risk of the Joint Board or assignee, as applicable. Any such entry onto an Optioned Property shall occur during normal business hours, after giving the City or the Company, as applicable reasonable advance notice and shall be conducted in a manner so as not to interfere with lawful activities on and use of the Industrial Land or such Optioned Property. The Joint Board or assignee, as applicable, shall repair any damage to such Optioned Property caused by any such inspections and in no event shall unreasonably invasive testing be conducted at or on an Optioned Property.

Section 3.4. Subdivision Rights. The Joint Board shall have the further right, but not the obligation, to cause to be replatted, subdivided, and re-subdivided the Industrial Lands or any portions thereof at any time and from time to time as may be deemed necessary or convenient by and at the sole cost and expense of the Joint Board. In each such event, the City and the Company each agree to cooperate in good faith with the Joint Board, to with consent to such subdivision or re-subdivision and to execute such instruments as may reasonably be required to effectuate each such replatting, subdivision, or re-subdivision.

ARTICLE IV. ALLOCATION OF GAINS AND LOSSES

Section 4.1. Apportionment of Gains and Losses. In connection with any sale of an Optioned Property from time to time consummated pursuant to this Agreement, the City, the Company and the Joint Board mutually agree that any resultant sale proceeds shall, after deducting reasonable out of pocket expenses of the Joint Board, be distributed to the City and the Company pro rata based on proportionate area of [such Optioned Property/the total then-unsold portion of the Industrial Lands]

owned in fee respectively by the City and the Company. In the event that such sale proceeds are less than the total original purchase price paid by the City or by the Company originally acquiring fee title in such Optioned Property the sale proceeds shall be distributed to the City and the Company based on the proportionate share of the combined original purchase price paid by the City and the Company. This allocation is illustrated by the following example:

City's original purchase price of City portion of Optioned Property = \$15,000
Company's original purchase price of Company's portion of Optioned Property = \$10,000

City's proportionate share of total original purchase price of Optioned Property = 60%
Company's proportionate share of total original purchase price of Optioned Property = 40%

Optioned Property current sale price = \$20,000; a resultant \$5,000 loss (Total original purchase price of \$25,000 minus current sale price of \$20,000 = \$5,000)

Applicable apportionment of \$20,000 current sale proceeds = \$12,000 (60%) to City; \$8,000 (40%) to Company, notwithstanding respective acreage ownerships.

Section 4.2. Joint Board Expenses. The parties to this Agreement each agree that Joint Board shall be entitled to reimbursements from net sale proceeds prior to any distributions under Section 4.1 of this Agreement for any and all reasonable out of pocket expenses or amounts incurred advanced by or on behalf of the Joint Board in connection with the sale of any Optioned Property.

ARTICLE V. MISCELLANEOUS PROVISIONS

Section 5.1. Representations of the Parties. The parties to this Agreement each hereby represents and warrants to the other party and to the Joint Board as follows:

(a) The execution and delivery of this Agreement by such party will not conflict with or result in a breach of any of the terms of, or constitute a default under, any indenture, mortgage, deed of trust, lease or other agreement or instrument to which such party or any parent, affiliate or principal of such party is a party or by which such party or any parent, affiliate or principal of such party is bound or any applicable articles of organization, or operating agreement, or any of the rules or regulations of any governmental authority applicable to such party or any parent, affiliate or principal of such party;

(b) Each such party has full power and authority to execute and deliver and perform the terms and obligations of this Agreement. Each party has been authorized by all necessary action to execute and deliver this Agreement, which shall constitute the legal, valid and binding obligation of such party, enforceable in accordance with its terms, subject to applicable laws affecting cities, bankruptcy and other laws affecting creditors' rights generally and to general principles of equity; and

(c) There are no actions or proceedings by or before any court, governmental commission, board, bureau, or any other administrative agency pending, threatened, or affecting any party that would impair that party's ability to perform under this Agreement; and

(d) The City and the Company each further represent and warrant to each other and to the Joint Board that while this Agreement is in effect: (i) neither the City nor the Company shall enter into any agreements affecting any portion of the Industrial Lands or an Optioned Property or any portion thereof without the prior written consent of the Joint Board and the other party; and (ii) neither the City nor the Company Seller shall enter into any agreement or lease with or grant any option or right to any person or entity other than the Joint Board Purchaser with respect to the sale, transfer or conveyance of the Industrial Lands, an Optioned Property, or any portion thereof.

Section 5.2. Remedies; Specific Performance Available. The parties to this Agreement may, either in law or equity, by suit, action, mandamus or other proceedings in court, seek declaratory relief, enforce and compel specific performance of this Agreement or any portion thereof.

Section 5.3. Notices. Whenever notice or other communication is called for in this Agreement to be given or is otherwise given, such notice shall be in writing addressed to the addressees at the addresses set forth below, and transmitted by any of the following means: (a) personal service; (b) overnight courier; or (c) registered or certified United States mail, return receipt requested:

If to the City: City of Moberly
101 West Reed Street - City Hall
Moberly, Missouri 65270
Attention: City Manager

If to the Company: Moberly Holding Company
115 North Williams Street
Moberly, Missouri 65270
Attention: President

If to the Joint Board: Joint Board of Control
c/o City of Moberly
101 West Reed Street
Moberly, Missouri 65270
Attention: Moberly City Manager

or to such other persons as the parties may designate in writing from time to time in accordance with this Section 5.3 and all said notices shall be deemed given, as applicable, (a) upon hand delivery, (b) upon deposit with an overnight courier, or (c) upon deposit in the United States mail.

Section 5.4. Further Assistance. The parties to this Agreement each agree to take such actions and execute such documents and instruments including, without limitation, the execution and recording in the office of the Randolph County Recorder of deeds, a memorandum of this Agreement setting forth the terms of the Options granted hereby and other property rights documents consistent with the parties' obligations under this Agreement, and all as may be reasonably necessary or appropriate to carry out the terms, provisions and intent of this Agreement and to aid and assist each other in carrying out said terms, provisions and intent.

Section 5.5. Severability. The provisions of this Agreement shall be deemed severable. If any word, phrase, term, sentence, paragraph, or other portion of this Agreement shall, at any time or to any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected by such partial invalidity, and each remaining word, phrase, term, sentence, paragraph covenant, or other portion of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

Section 5.6. Headings; No Presumption; Agreement Preparation. The headings and captions of this Agreement are for convenience and reference only, and in no way define, limit, or describe the scope or intent of this Agreement of any provision thereof and shall in no way be deemed to explain, modify, amplify or aid in the interpretation or construction of the provisions of this Agreement. Each party to this Agreement and their attorneys have had full opportunity to review and participate in the drafting of the final form of this Agreement and all documents attached as exhibits. This Agreement shall be construed without regard to any presumption or other rule of construction whereby ambiguities within this Agreement or such other document would be construed or interpreted against the party causing the document to be drafted. The parties hereto each further represent that the terms of this Agreement and the documents attached as exhibits hereto have been completely read by them and that those terms are fully understood and voluntarily accepted by them. In any interpretation, construction or determination of the meaning of any provision of this Agreement, no presumption whatsoever shall arise from the fact that the Agreement was prepared by or on behalf of any party hereto.

Section 5.7. Choice of Law; Venue; Waiver of Objections. This Agreement and its performance shall be deemed to have been fully executed, made by the parties in, and governed by and construed in accordance with the laws of the State of Missouri applicable to contracts made and to be performed wholly within such state, without regard to choice or conflict of laws provisions. The parties hereto each agree that any action at law, suit in equity, or other judicial proceeding arising out of this Agreement shall be instituted only in the Circuit Court of Randolph County, Missouri or in federal court of the Eastern District of Missouri and waive any objection based upon venue or *forum non conveniens* or otherwise.

Section 5.8. Entire Agreement; Amendments; No Waiver by Prior Actions. The parties hereto agree that this Agreement shall constitute the entire agreement among the parties and no other agreements or representations other than those contained in this Agreement have been made by the parties. This Agreement shall be amended only in writing and effective when signed by the duly authorized agents of the parties and of the Joint Board. The failure of any party hereto to

insist in any one or more cases upon the strict performance of any term, covenant or condition of this Agreement to be performed or observed by another party shall not constitute a waiver or relinquishment for the future of any such term, covenant or condition.

Section 5.9. No Waiver of Sovereign Immunity; No Personal Liability. Nothing in this Agreement shall be construed or deemed to constitute a waiver of the City’s sovereign immunity. No official, officer, agent, attorney, employee, or representative of the City, the Company or the Joint Board shall be personally liable to any other party or the assignees, sublessees, successors, assigns, heirs or personal representatives of such party in the event of any default or breach by any party under this Agreement, or for any amount which may become due to any party or on any obligations under the terms of this Agreement.

Section 5.10. Relationship of the Parties; No Third Party Beneficiaries. Nothing contained in this Agreement nor any act of any party shall be deemed or construed to create a partnership or agency relationship among the parties or between any party and any other party or the Joint Board or their agents or representatives and this Agreement is and shall be limited to the specific purposes set out herein. Other than as expressly provided in this Agreement, no party shall be the agent of, or have any rights to create any obligations or liabilities binding on, any other party. The parties do not intend to confer any benefit under this Agreement on any person or entity other than the Joint Board and the named parties hereto.

Section 5.11. Binding Effect. Except as otherwise expressly provided in this Agreement, the covenants, conditions and agreements contained in this Agreement shall bind and inure to the benefit of the named parties hereto and the Joint Board and their respective successors and permitted assigns.

Section 5.12. Assignment Limited. Other than the permitted assignments provided for under Article III of this Agreement, this Agreement may not be assigned in whole or in part by any party without prior written consent of each of the other parties.

Section 5.13. Execution; Counterparts. Each person executing this Agreement in a representative capacity warrants and represents that he or she has authority to do so, and upon request by another party, proof of such authority will be furnished to the requesting party. This Agreement may be executed at different times and in two or more counterparts, and all counterparts so executed shall for all purposes constitute one and the same instrument, binding on the parties hereto, notwithstanding that all of the parties may not have executed the same counterpart. In proving this Agreement, it shall not be necessary to produce or account for more than one such counterpart executed by the party against whom enforcement is sought.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

CITY OF MOBERLY
(the “City”)

By: _____
Jerry Jeffrey, Mayor

ATTEST:

D. K. Galloway, CMC/MRCC, City Clerk

MOBERLY HOLDING COMPANY
(the “**Company**”)

By: _____
Printed name: _____
Title: _____

ATTEST:

ACKNOWLEDGED AND AGREED TO:

Joint Board of Control
(the “**Joint Board**”)

By: _____
Printed name: _____

ATTEST:

ACKNOWLEDGEMENTS

STATE OF MISSOURI)
) SS.

COUNTY OF RANDOLPH)

On this ____ day of _____, 2019, before me appeared Jerry Jeffrey, to me personally known, who being by me duly sworn, did say that he is the Mayor of the CITY OF MOBERLY, a city of the third class and Missouri municipal corporation and that the seal affixed to the foregoing instrument is the official seal of said City, and that said instrument was signed and sealed in behalf of said City by authority of its City Council and said Mayor acknowledged said instrument to be the free act and deed of said City.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year first above written.

Notary Public

My commission expires:

STATE OF MISSOURI)
) SS.
COUNTY OF RANDOLPH)

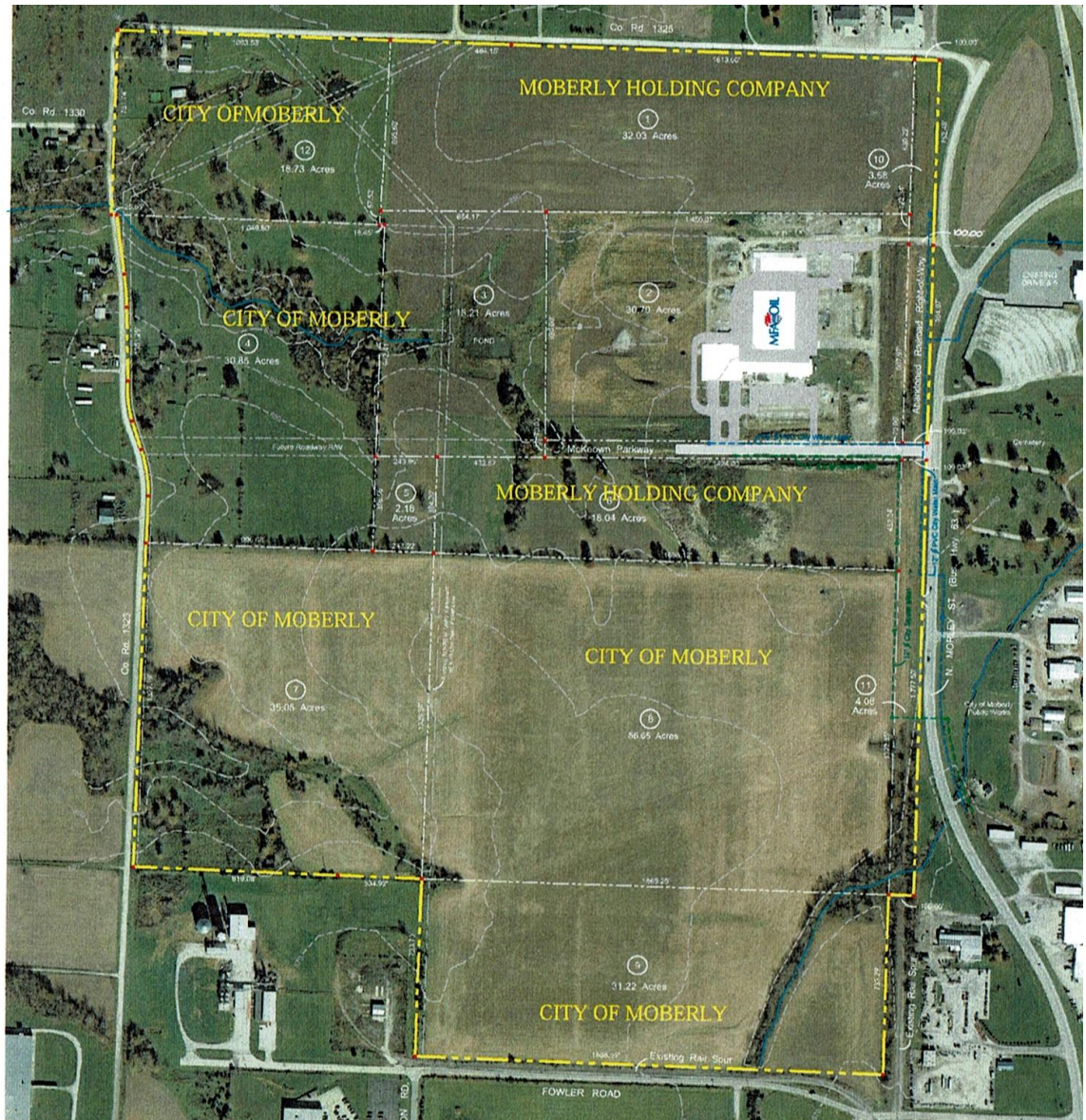
On this ____ day of _____, 2019, before me appeared _____, to me personally known, who being by me duly sworn, did say that he/she is the _____ of MOBERLY HOLDING COMPANY, a nonprofit, public benefit corporation organized and existing pursuant to Chapter 355 of the Revised Statutes of Missouri, as amended, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors and said officer acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year first above written.

Notary Public

My commission expires:

Exhibit A
The Industrial Lands



Lot - 1	32.03 Acres	"Available"
Lot - 2	30.70 Acres	SOLD - MFA Oil
Lot - 3	15.21 Acres	"Available"
Lot - 4	30.85 Acres	"Available"
Lot - 5	2.18 Acres	"Available"
Lot - 6	18.04 Acres	"Available"
Lot - 7	35.05 Acres	"Available"
Lot - 8	56.65 Acres	"Available"
Lot - 9	31.22 Acres	"Available"
Lot - 10	3.58 Acres	"Available"
Lot - 11	4.08 Acres	"Available"
Lot - 12	18.73 Acres	"Available"
278.32 Acres		TOTAL



City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: Police Dept.
 Date: November 18, 2019

Agenda Item: A Resolution Accepting The Bid Of Moberly Motors For A 2020 Ford Police Interceptor Explorer And Authorizing The Purchase For \$33,599.

Summary:

A request for bids for two patrol cars and one SUV for the police department were requested from Moberly Motors, Joe Machens Ford, Thomas Motors and Bob McCosh Chevrolet. Only Moberly Motors submitted bids. The bid tabulation is attached. Required upgrades to the Durango; vinyl rear seats, rubber interior flooring, center console and noise suppression increase the price to 31,573. If the interior emergency lights do not transfer, and the console for the Durgano does not accept our current two radio and light controls, the price will increase approximately another 3,400 dollars to 34,973. Based on these prices, the Police Department requests the bid for the 2020 Ford Police Interceptor Explorer AWD 4-door for \$32,898 and equipment group 67U and 67V, ultimate wiring package and the Police Wire Harness Kit (Front and Rear) for 701 dollars for a total cost of \$33,599. Adding the wiring package and harness kit greatly helps the installation of the radio, lights, computers and in-car camera. State bid price for the Explorer is 33,482.

Recommended

Action: Approve this resolution

Fund Name: Police Department CIP

Account Number: 100-007-5502

Available Budget \$:
101,128.00

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input type="checkbox"/> Staff Report	<input type="checkbox"/> Proposed Ordinance	M__ S__ Jeffrey	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Correspondence	<input checked="" type="checkbox"/> Proposed Resolution	Council Member		
<input checked="" type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M__ S__ Brubaker	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M__ S__ Kimmons	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M__ S__ Davis	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M__ S__ Kyser	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

BILL NO: _____

RESOLUTION NO: _____

A RESOLUTION ACCEPTING THE BID OF MOBERLY MOTORS FOR A 2020 FORD POLICE INTERCEPTOR EXPLORER AND AUTHORIZING THE PURCHASE FOR \$33,599.

WHEREAS, the City of Moberly Police Department requested bids from four (4) vendors for a new police sport utility vehicle; and

WHEREAS, Moberly Motors was the only responsive bidder with bids for a 2020 Dodge Durango and a 2020 Ford Police Interceptor Explorer; and

WHEREAS, the Moberly Police Department recommends acceptance of the Moberly Motors' bid for the 2020 Ford vehicle for a total cost of \$33,599.00.

THEREFORE, the Moberly, Missouri, City Council accepts the bid of Moberly Motors and authorizes the City Manager or his designee to purchase the Ford Police Interceptor for the price of \$33,599.00.

RESOLVED this 18th day of November, 2019, by the Council of the City of Moberly, Missouri.

Presiding Officer at Meeting

ATTEST:

City Clerk

City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: Public Utilities
 Date: November 18, 2019

Agenda Item: A Resolution Of The City Of Moberly, Missouri, Authorizing Filing Of Proposed Technical Standard Specifications Codes For Sanitary Sewer Systems And Water Main Construction.

Summary: The current Water System Standard Specifications and Construction details for the water system were put into place in November of 2012. The current Standard Specifications for Sanitary Gravity Sewer System was put into place on August 19th, 2005. Updating the Standard Specifications and Construction details for the water and sanitary sewer system, as well as getting them approved with Missouri Department of Natural Resources will eliminate the process of getting permits through Missouri Department of Natural Resources. Additionally, this will speed up the pan review process when required. This has to be on file with the City Clerk’s office for 90 days before adoption of the Water and Sewer Specifications.

Recommended

Action: Approve this Resolution.

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input type="checkbox"/> Staff Report	<input type="checkbox"/> Proposed Ordinance	M___ S___ Jeffrey	___	___
<input type="checkbox"/> Correspondence	<input checked="" type="checkbox"/> Proposed Resolution	Council Member		
<input type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney’s Report	M___ S___ Brubaker	___	___
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M___ S___ Kimmons	___	___
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M___ S___ Davis	___	___
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M___ S___ Kyser	___	___
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

BILL NO: _____

RESOLUTION NO: _____

A RESOLUTION OF THE CITY OF MOBERLY, MISSOURI, AUTHORIZING FILING OF PROPOSED TECHNICAL STANDARD SPECIFICATIONS CODES FOR SANITARY SEWER SYSTEMS AND WATER MAIN CONSTRUCTION.

WHEREAS, the utilities department wishes to adopt standardized code specifications for sanitary sewer systems and water main construction; and

WHEREAS, Poepping, Stone, Bach & Associates, Inc., contracted with the city to prepare such technical code specifications which have been reviewed by the water utilities department; and

WHEREAS, the two codes have been delivered to the City Clerk of the City of Moberly where they will remain on file for a period of ninety (90) days; and

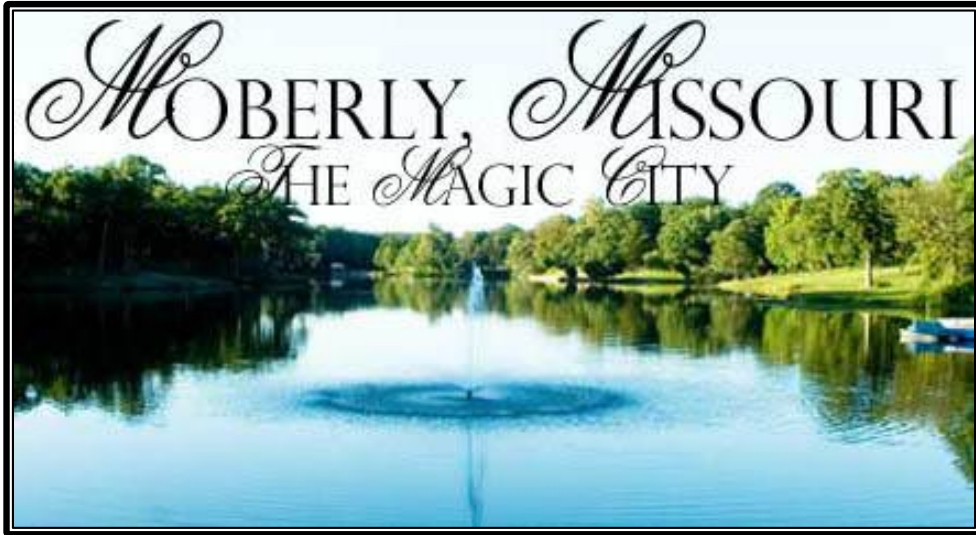
WHEREAS, once the two codes have remained on file with the City Clerk for a period of ninety (90) days they may be adopted by the City Council by Ordinance.

NOW, THEREFORE, BE IT RESOLVED this 18th day of November, 2019, that the proposed technical standard specifications codes for sanitary sewer systems and water main construction be filed with the City Clerk to remain on file for a period of ninety (90) days.

Presiding Officer

DATE: _____

ATTEST: _____
City Clerk



CITY OF MOBERLY, MISSOURI

**STANDARD SPECIFICATIONS
FOR WATER MAIN CONSTRUCTION**

(ADOPTED _____)



PSBA

Poepping, Stone, Bach & Associates, Inc. *Engineers, Architects, Surveyors, GIS*

Suite 224, 801 Broadway St., P.O. Box 190, Hannibal, MO 63401 Ph: 573-406-0541

**CITY OF MOBERLY, MISSOURI
STANDARD SPECIFICATIONS FOR WATER MAIN CONSTRUCTION**

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SECTION 01000 APPROVAL AND ACCEPTANCE

PART 1 – GENERAL

1.01 SUMMARY

- A. These specifications are for the construction, replacement, extension, and alteration of water mains and water services under authority of the City of Moberly, Missouri.
- B. The intent of these specifications and details is to specify the type and quality of all water main and service materials, installation, inspection, testing, and final acceptance by the City for all improvements, replacements, and extensions intended to be included as a part of the City's water distribution system.
- C. All design, permitting, materials, and work shall be in accordance with applicable sections of:
 - 1. City of Moberly Standard Specifications for Water Main Construction
 - 2. City of Moberly, Missouri – Code of Ordinances, Chapter 42-Utilities
 - 3. Missouri Department of Natural Resources Minimum Design Standards for Community Water Systems.
 - 4. Missouri Standard Specification for Highway Construction, current edition
 - 5. Approved, Project-Specific Special Provisions, Specifications, and Plans
- D. The work shall consist of obtaining all required permits, approvals, and legal easements before beginning work. Work also includes furnishing all labor, materials, and equipment for the complete installation of water main extension and/or alterations, and appurtenances, in conformance with the approved lines and grades.
- E. Modifications, alterations, or changes to City of Moberly, Missouri Standard Specifications and Details during the course of work must be submitted to the City for approval prior to performing work.

1.02 DEFINITIONS

- A. City: City of Moberly, Missouri
- B. Water Department: City Water Department
- C. Enforcement Officer: City Director of Public Utilities or designated representative
- D. Engineer: Licensed Professional Engineer in responsible charge for the project and licensed to perform services in the State of Missouri
- E. Developer: Entity requesting water service construction, modifications, extensions, and/or alteration to the city water system. The Developer could be a public or private entity, such as the City or private Developer.
- F. Contractor: Entity contracted by Developer to perform work on water main and services. The Contractor is responsible for constructing approved plans

Standard Specifications For
Water Main Construction

- G. Owner: Entity who is responsible for long term performance, maintenance, and operation of new water mains. The City will typically become the Owner upon final approval and acceptance by City. The Developer will be responsible for the project until final approval and acceptance.
- H. Standard Specifications: City of Moberly, Missouri Specifications for Water Main Construction

1.03 DESIGN - GENERAL

- A. All water main extensions or alterations shall be designed, signed, and sealed by an Engineer.
- B. Water pressure in distribution systems below 20 pounds per square inch (psi) violate Missouri Safe Drinking Water Regulation 10 CSR 60-4.080 (9). The Missouri Department of Natural Resources considers pressures below 20 psi to be an imminent hazard to public health.
- C. All water mains and systems shall be sized in accordance with a hydraulic analysis based on flow demands and pressure requirements. Distribution systems shall be designed to maintain at least 35 psi normal working pressure at ground level at all points in the distribution system under all conditions of design flow.
- D. Systems designed for fire protection shall provide a minimum flow of 250 GPM for a duration of two hours. Water mains that are not designed to provide fire protection shall not have fire hydrants connected to them.
- E. All water lines shall be buried a minimum 3.5 feet below grade, unless otherwise approved.
- F. Water main dead ends shall be avoided, if possible. If unavoidable, dead ends shall have a fire hydrant, flushing hydrant, or other approved assembly for flushing purposes.
 - 1. Flush assemblies shall have a gate valve and box the same size as the water main. Flush assembly details (other than fire hydrant) shall be included in the project specific plans.
- G. Restrained joints, where specified, shall have thrust reinforcement using properly designed concrete thrust blocks or manufactured mechanical and harness restraints. All thrust restraint shall be designed based on the working pressure of the pipe and bearing pressure of the soil. Manufactured restraint is City preferred method for restraint. Concrete thrust blocking may be used in conjunction with manufactured restraint.
- H. Generally, valves shall be located at intersections with other water mains, on both sides of railway, waterway, and bridge crossings.

1.04 DESIGN - SEPARATION REQUIREMENTS

- A. Public health is paramount. To protect the public health, the following separation requirements shall be met for water lines near sanitary and storm sewer lines. These requirements apply to both conventional trench-type construction methods and trenchless construction methods including but not limited to directional drilling and utility jacking and boring. These requirements shall be considered minimum requirements. Additional requirements may be required as conditions of required permits.
- B. The following factors should be design considerations for separation requirements:
 - 1. Materials and type of joints for water and non-potable fluid pipes.
 - 2. Soil conditions.

Standard Specifications For
Water Main Construction

3. Service and branch connections into the water main and non-potable fluid.
4. Compensating variations in the horizontal and vertical separations.
5. Space for repair and alterations of water and non-potable fluid pipes.
6. Routing water mains around manholes.

C. Horizontal Separation Requirements

1. See Standard Details.
2. Water lines shall be located at least ten (10) feet horizontally from any existing or proposed line carrying non-potable fluids such as, but not limited to, drains, storm sewers, sanitary sewers, combined sewers, sewer service connections, inlets, manholes, and process waste or product lines. The distance shall be measured edge to edge.
3. Water mains may be located closer than ten (10) feet when:
 - a. Local conditions prevent lateral separation.
 - b. The water main invert is at least 18 inches above the crown of non-potable fluid lines.
 - c. The water main is either in a separate trench or in an adjacent trench on an undisturbed earth shelf located on one side of the non-potable fluid line.
4. If separation requirements listed above cannot be met, the water line shall be placed in casing suitable for potable water in accordance with City Standard Specifications or the non-potable fluid line shall be re-constructed using pipe suitable for potable water use in accordance with Section 01001 – Standard Specification for Water Lines.

D. Vertical Separation Requirements

1. See Standard Details. The vertical separation from water lines and non-potable fluid lines shall be 18 inches.
 - a. If the 18-inch vertical separation cannot be met for water lines above non-potable fluid lines, the water line shall be placed in casing suitable for potable water in accordance with City Standard Specifications and Details. Casing pipe shall be placed no closer than 4 inches above non-potable fluid pipe.
 - b. For water lines placed 18 inches or more below a non-potable fluid line, the water line shall be placed in casing suitable for potable water in accordance with City Standard Specifications and Details. Adequate support shall be provided to prevent damage to utilities located above the water line.
 - c. Where required, protective casing shall extend a minimum of 10 feet from non-potable fluid line measured perpendicular to the non-potable fluid line. Casing shall be sealed at each end according to City Standard Specifications and Details.

1.05 PRE – CONSTRUCTION SUBMITTALS

- A. **Preliminary Submittal:** Project-specific special provisions, specifications, and plans shall be submitted to the City of Moberly for review and approval of any public water main alteration or extension. The submittal shall be prepared by an Engineer. Submittal shall include:
1. Design parameters based on flow demands and pressure requirements.
 2. Proposed alignment and grade, details of connections to existing water systems, construction locations, location of valves, hydrants and other facilities, and proposed location of water services.
 3. Materials list and manufacturer data sheets, catalog data, and illustrations for all proposed materials to be used for the project. Material test certificates and affidavits of compliance with applicable standards.
 4. A work plan describing construction means, methods, sequencing, and scheduling.
 5. Plan showing all existing utilities and identifying potential conflicts with proposed work. If utility relocation is required, the Developer and their Engineer, in conjunction with respective utility owners, shall provide a proposed utility relocation plan for approval. The relocation of existing utilities shall be incorporated into the overall construction project as well as appropriate demolition plan of abandoned utility facilities, as required.
 6. If perception of or potential exists for contamination due to cross-connections or backflow, the design must include mitigation measures for control and prevention.
 7. Other submittals detailed in other sections of City Standard Specifications
- B. **Preliminary Submittal Review(s):** Project-specific special provisions, specifications, and plans shall be submitted to the City of Moberly for review and approval of any public water main alteration or extension. The submittal shall be prepared by an engineer licensed to practice in the State of Missouri. Submittal shall include:
1. At discretion of City, multiple iterations of the preliminary submittal review will be until all design and pertinent modifications are complete.
- C. **Final Submittal:**
1. Final submittal to the City shall include Engineer's official seal, current date stamp, and signature on project-specific special provisions, specifications, and plans. Three (3) hard copies and one (1) electronic copy in .pdf format.
 2. Submit approved Missouri Department of Natural Resources, Water Protection Program, Construction Permit including all stipulations. No work may begin until a copy of the approved permit has been provided to City.
 3. Submit legally recorded copies of required utility easements, if any. No work may begin within proposed easements without having legally recorded permanent easements.
 4. Submit approved Missouri Department of Transportation Highways and Transportation Commission, Permit to Work on Right of Way, if applicable.

Standard Specifications For
Water Main Construction

1.06 INSPECTION

- A. In general, all work shall be inspected by the Enforcement Officer. Inspection for acceptance of materials will be conducted as soon as practical after materials arrive on the job site. Inspections will be performed as work progresses.
- B. The Enforcement Officer shall always have access for observation and inspection during the work. Access will be coordinated with the Contractor. The Contractor shall furnish all reasonable aid and assistance required by the Enforcement Officer for the proper inspection and examination of work and materials.
- C. The Enforcement Officer reserves the right to reject materials and work not in compliance or accordance with approved plans and specifications.
- D. The Enforcement Officer reserves the right to suspend work.
- E. The Enforcement Officer shall be notified a minimum of two (2) working days for inspection and observation of all testing. Notifications are also required in accordance with other Standard Specifications.
- F. Under no circumstance shall taps or connections be made to existing mains without approval. All taps will be coordinated by Contractor and conducted in the presence of Enforcement Officer.

1.07 POST – CONSTRUCTION FINAL SUBMITTAL

- A. Upon successful completion of construction and obtaining required testing results meeting or exceeding performance requirements, the Developer shall submit:
 - 1. Copies of all test reports, including failed tests.
 - 2. Submit two (2) copies of as-built drawings to City showing all changes, deviations, or modifications to original plans. As-built drawings shall include reference swing tie measurements from identifiable landmarks to all valves. Each valve shall have at least two (2) reference swing tie measurements.
 - 3. As-built drawings shall be completed by Engineer, dated and clearly marked with the name and company of the person illustrating the changes.

1.08 ACCEPTANCE

- A. After Final Submittal and City Approval, the City will conditionally accept the work.
- B. The Owner and Contractor shall warranty all work and materials for a period of one year. The Owner and Contractor will be responsible for repairing and replacing failures or damages resulting from poor workmanship and defective materials.
- C. The Enforcement Officer will inspect the work periodically during the warranty period, document conditions, and notify Developer of repairs required, if any.
- D. Final acceptance will be given when the warranty period ends, and all work and site conditions are to the satisfaction of the City.

END OF SECTION 01000

SECTION 01001 WATER LINES

PART 1 – GENERAL

1.01 SUMMARY

- A. The design and construction of water main replacements, extensions, and alterations shall be in conformance with the City of Moberly Standard Specifications and Missouri Department of Natural Resources Minimum Design Standards for Missouri Community Water Systems.
- B. The work shall consist of furnishing all labor, materials, and equipment for complete installation of water main replacements, extensions, alterations, and appurtenances, in conformance with the lines and grades shown on the plans, as established by the Engineer, or otherwise specified.
- C. The Contractor shall employ skilled, qualified workers and supervision to perform work following generally accepted industry practices. The City reserves the right to suspend work if, in the opinion of the Enforcement Officer, this requirement is not being met.
- D. If surface or ground contamination is suspected or encountered, notify the City immediately. The Developer and Contractor, in communication with the City, shall assess conditions and develop a plan for continued work including but not limited to: removal and disposal of contamination, specifying different water line materials and/or water line realignment.

1.02 DEFINITIONS

- A. City: City of Moberly, Missouri
- B. Water Department: City Water Department
- C. Enforcement Officer: City Director of Public Utilities or designated representative
- D. Engineer: Licensed Professional Engineer in responsible charge for the project licensed to perform services in the State of Missouri.
- E. Developer: Entity requesting water service construction, modifications, extensions, or alterations to the city water system. The Developer could be a public or private entity, such as the City of Moberly or a private Developer.
- F. Contractor: Entity contracted by Developer to perform work on water main and services. The Contractor is responsible for constructing approved plans.
- G. Owner: Entity who is responsible for long term performance, maintenance, and operation of new water mains. The City will typically become the Owner upon final approval and acceptance by City. The Developer will be responsible for the project until final approval and acceptance.
- H. AWWA: American Water Works Association
- I. ASTM: American Society for Testing and Materials
- J. ANSI: American National Standards Institute
- K. MSS: Manufacturers Standardization Society of the Valve and Fitting Industry

1.03 RELATED WORK

- A. Section 01000 – Approval and Acceptance
- B. Section 01002 - Earthwork
- C. Section 01003 - Directional Drilling
- D. Section 01004 - Utility Jacking and Boring
- E. Section 01005 - Pavement Repair

1.04 REFERENCES

- A. American Water Works Association (AWWA)

- C104 – Cement Mortar Lining for Ductile Iron Pipe and Fittings
- C105 – Polyethylene Encasement for Ductile Iron Pipe Systems
- C110 – Ductile Iron and Gray Iron Fittings
- C111 – Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings
- C115 – Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges
- C150 – Thickness Design of Ductile Iron Pipe
- C151 – Ductile Iron Pipe, Centrifugally Cast
- C153 – Ductile Iron Compact Fittings
- C200 – Steel Water Pipe, 6 in. and larger
- C207 – Steel Pipe Flanges for Water Works Service, sizes 4 in. through 144 in.
- C600 – Installation of Ductile Iron Mains and their Appurtenances
- C651 – Disinfecting Water Mains
- C800 – Underground Service Line Valves and Fittings
- C900 – Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 in. through 60 in.
- M11 – Steel Pipe, A guide for Design and Installation
- M23 – PVC Pipe Design and Installation

- B. American Society for Testing and Materials (ASTM)

- B88 – Seamless Copper Water Tube
- D1248 – Polyethylene Plastics Extrusion Materials for Wire and Cable
- D1784 – Rigid PVC Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds
- D3139 – Standard Specification: Plastic Pressure Pipe Joints Using Flexible Elastomeric seals
- F477 – Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

- C. American National Standards Institute (ANSI)

- B16.22 – Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings

- D. Manufacturers Standardization Society of the Valve and Fitting Industry (MSS)

- SP-60 – Connecting Flange Joint Between Tapping Sleeves and Tapping Valves

1.05 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least five (5) business days prior to commencing work.

1.06 SUBMITTALS

- A. See Section 1000 – Approval and Acceptance
- B. Work Plan detailing means, methods, equipment, sequencing, and schedule for pressure and leakage testing, disinfection and chlorination, and flushing.

1.07 JOB CONDITIONS

- A. Interrupting Utility Service:
 - 1. Utility Service to existing City customers shall not be interrupted unless approved by the Enforcement Officer and the existing utility provider.
 - 2. If approval for an interruption of service is obtained, the Contractor shall provide an eight-hour notification to the Enforcement Officer and all affected occupants. The City Fire Department shall be notified at least 24-hours in advance.
 - 3. The Contractor shall provide standby service, if required. Outages shall not exceed 6 hours and will be coordinated with the Enforcement Officer.
 - 4. The Water Department is responsible for operation of in-service valves, including closure as needed. Closure by other entities will not be permitted.
 - 5. The Contractor shall be responsible for preventing contamination of existing lines.
- B. New water mains must be fully tested, disinfected, and approved before installing service line connections.
- C. Whenever pipe laying is not actively in progress, open ends of all installed pipe and fittings shall be sealed water tight.

1.08 MATERIAL DELIVERY, STORAGE, AND HANDLING

- A. Means and methods for material shipping, loading, transporting, unloading, storing, and placing shall prevent damage. Damaged and/or defective materials shall not be installed. The City reserves the right to reject all damaged or defective materials.
- B. All materials shall be packaged, labeled, or otherwise marked with adequate, identifiable information to determine suitability for intended project application.
- C. Materials shall be stored at a mutually agreed upon location. Materials shall not be stored directly on the ground. They shall be stored in a manner to ensure they are kept clean, dry, and free of foreign debris.
- D. Materials shall be protected in a manner to prevent entrance of contamination or foreign debris.

1.09 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.

Standard Specifications for
Water Main Construction

B. Water Mains:

1. **Water main** will be measured and paid by the lineal foot of pipe along pipe centerline, including all labor, equipment, and materials required for installation. Unless otherwise identified as a bid item, unit cost shall include: excavation, backfill, fittings, joints, thrust blocks, tracer wire, erosion control, pavement repair, seeding, and cleanup.
2. **Valve and Valve Box** will be counted as a single unit and be paid on a per-each basis, including all labor, equipment, and materials required for installation. See Standard Details.
3. **Meter Setting and Meter Box** will be counted as a single unit and be paid on a per-each basis, including all labor, equipment, and materials required for installation. See Standard Details.
4. **Service Lines and Connections** will be paid for on a per each basis, including all labor, equipment, and materials required for installation. Unit cost will include connections at water main and connections on City side of meter setting. Unit cost shall include all taps, saddles, sleeves, corporation stops, curb stops, etc... See Standard Details.
5. **Fire Hydrants** will be paid for on a per each basis including, all labor, equipment, and materials required for installation. Valves and valve boxes will be paid for separately. Pipe and joints required from main to hydrant shall be included in unit cost.
6. **Casing Pipe** will be measured and paid by the lineal foot along casing centerline. Unit cost shall include insulating spacers and end seals. Product pipe will be paid for separately. Casing required for trenchless construction methods will be paid for separately.
7. Estimated quantities for bid items could change. If quantities increase, additional materials and associated work will be paid for at contract unit cost. Purchasing additional materials and performing additional work shall not be done without prior written approval from the Enforcement Officer.
8. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
9. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All materials shall conform to the latest AWWA, ASTM, ANSI, and MSS standards and specifications, and, where applicable, shall be certified by National Sanitation Foundation (NSF) or underwriters' laboratories (UL) for drinking water use.
- B. All materials shall be suitable for use in potable drinking water systems.
- C. All buried iron pipe and fittings shall be coated with manufacturer's standard exterior enamel coating.
- D. Water mains shall be six (6) inches or greater.

2.02 DUCTILE IRON PIPE (DIP) AND FITTINGS

A. DIP Pipe:

1. Conform to AWWA C115, C150, and C151 unless otherwise specified.
2. Acceptable Manufacturers: American Cast Iron Pipe Company, U.S. Pipe Supply, EBBA Iron Sales, Inc., or approved equal.
3. Ductile iron pipe shall be used in commercial and industrial areas and may be used in residential areas.

B. DIP Joints:

1. Conform to AWWA C111 and C115, mechanical joints with ductile iron glands.
2. Conform to AWWA C110 and AWWA C115 push-on joints with neoprene gaskets.
3. Buried joints shall be push-on type unless restrained or mechanical joints are required, specified, or as shown on the drawings.
4. Restrained mechanical joints shall be EBBA Iron Megalug Series 1100 or approved equal. Bell harness joint restraint shall be EBBA Megalug Series 1700 or approved equal. Restrained joints will be required at all fittings, including bends, tees, crosses, fire hydrants, caps, plugs, and all pipe specified for joint restraint.

C. DIP Fittings:

1. Conform to AWWA C110 or C153, ductile iron with a pressure rating of 250 psi for flanged joint and pressure rating of 350 psi for mechanical joints.

D. DIP Lining:

1. Conform to AWWA C104, cement mortar for all DIP pipe and fittings.

2.03 POLYVINYL CHLORIDE PIPE (PVC) AND FITTINGS

A. PVC Pipe:

1. PVC pressure pipe shall conform to AWWA C900, Class DR 14 for pipe 12 inches or less and AWWA C905, class DR 14 for pipe greater than 12. PVC pipe and fittings shall be compatible and interchangeable with ductile iron pipe.
2. Acceptable Manufacturers: Certainteed Corporation, J-M Manufacturing Company, Inc., Diamond Plastics, Clow Corp, or approved equal.
3. PVC pipe materials shall be uniformly blended with un-plasticized PVC. Materials and finished product shall not be hazardous to humans. Materials shall not impact or alter taste, odor, or chemical composition of potable water.
4. PVC pipe shall have National Sanitation Foundation (NSF) seal and be made of virgin components in accordance with ASTM D1784 Class 12454-A or Class 12454-B. Manufacturer shall provide certifications of conformance with these requirements.

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- B. Joints:
 - 1. ASTM D3139 with ASTM F477 Gaskets. Wall thickness in pipe bell shall not be less than pipe barrel. Pipe shall have reference marks on male end indicating proper seating into bell.
 - 2. Buried joints shall be push-on type unless restrained or mechanical joints are required, specified, or as shown on the drawings.
 - 3. Mechanical joint restraint shall be EBBA Iron Megalug Series 2000PV or approved equal. Bell harness joint restraint shall be EBBA Series 1900 or approved equal.
- C. Fittings:
 - 1. C900 and C905 PVC pipe shall use ductile iron pipe fittings. Fittings shall have a minimum pressure rating equal to or greater than the pipe.

2.04 GATE VALVES

- A. Gate Valves shall conform to AWWA C509 with minimum design working pressure of 200 psi.
 - 1. Gate valves shall be iron body, bronze trim, super seal or resilient seated, non-rising stem, opening counter clockwise, mechanical joint flanges with stainless steel hardware, and double O-ring stuffing seals.
 - 2. Valves shall have a 2-inch operating nut for below ground applications and a hand-wheel for above ground applications.
 - 3. Acceptable Manufacturers: Mueller, American, U.S. Pipe Valve and Hydrant, or approved equal.

2.05 VALVE BOXES

- A. Three-section cast iron screw-type shaft adjustment, minimum 5-inch inside diameter with lid marked "water". See Standard Details.
- B. Valve boxes must be compatible with valves.

2.06 TAPPING VALVES

- A. Tapping valves shall meet requirements for gate valves except tapping valve shall be equipped with a raised lip constructed in accordance with MSS SP-60 for valve centering on the tapping saddle.
- B. Acceptable Manufacturers: Mueller, American, U.S. Pipe Valve and Hydrant, or approved equal.

2.07 TAPPING SLEEVES

- A. Tapping sleeves shall be stainless steel including all hardware. The seal shall be fully circumferential and gridded. Outlet flange dimensions and drilling shall comply with ANSI B16.1, class 150 and indexed according to MSS SP-60 to accept tapping valve.
- B. Acceptable Manufacturers: American Darling 5 ¼ inch B-84-B, or approved equal.

2.08 FIRE HYDRANTS

- A. Hydrants shall be dry barrel type with lubricating reservoir, 3 way, opening counter clockwise, and minimum 250 psi working pressure.
- B. Hydrants shall have two (2) standard 2 ½ inch male hose connections and one (1) standard 4 ½ inch male pumper connection.
- C. Acceptable Products: American Darling B-84-B, 5 ¼ inch or approved equal.

2.09 CASING PIPE

- A. This section applies when casing is required around water mains to comply with sanitary and storm sewer separation requirements. Casing materials, including joints, shall be suitable for potable water. Casing size shall be large enough to allow unrestricted installation of product pipe, including casing spacers, pipe fittings, and joints.
- B. Casing materials may be PVC, Steel, or High-Density Polyethylene (HDPE)
 - 1. PVC casing shall be in accordance with this section.
 - 2. Steel casing shall conform to AWWA C200 and AWWA M11, joined by fully welding in accordance with AWWA C206. Casing shall have a minimum wall thickness of 0.25-inch for casing up to 24 inches.
 - 3. HDPE casing shall be in accordance with Section 01003 – Directional Drilling.
- C. Projection type, non-metallic insulating spacers shall be used to support water main inside casing. Insulating spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.
- D. Synthetic rubber end seals shall be installed on each end of the casing pipe. End seals shall be Advanced Model Products – Model AC Pull-on or approved equal fastened tightly with stainless steel bands.
- E. See Standard Details.

2.10 SERVICE FITTINGS

- A. Corporation Stops for copper water services shall be Mueller Company Number H15020, H15008 or Ford Company number F1000-3, or approved equal.
- B. Corporation stops for plastic services shall be Mueller Company number H15008, Haze Manufacturing Company number 5200-DF, Ford Company number F1000-4, or approved equal.
- C. Corporation stops on PVC pipe shall be made with a saddle.
- D. Copper shall be used under pavement structures or polyethylene tubing in casing pipe.

2.11 SERVICE TUBING

- A. Copper Tube and Fittings
 - 1. Copper service tubing 3/4-inch through 1-inch shall conform to ASTM B88 - Type K annealed and soft tempered for buried installations.

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2. Fittings shall be wrought copper in accordance with ANSI 816.22, flared or compression type.
3. All copper lines installed in granular soils shall be encased in schedule 40 pvc pipe with solvent welded or compression type joints.
4. All service lines with sizes between ¾-inch and 1-inch shall be copper (or poly line with tracer wire) between the water main and meter.

B. Plastic Tube and Fittings

1. Plastic service tubing shall be ¾" minimum inner diameter and shall be plastic, 250 CTS, copper size.
2. Fittings shall be flared or compression type with stainless steel stiffeners.

2.12 METERS

- A. Meters supplied by the City. See standard details for meter setting configurations and materials.

2.13 POLYETHYLENE ENCASEMENT

- A. In general, the City does not require polyethylene encasement of ductile iron water mains and fittings. When project specific specifications require, use eight (8) mil (minimum) polyethylene in accordance with AWWA C105.

2.14 THRUST BLOCKS

- A. Provide concrete thrust blocks where specified or shown on the plans. Concrete for thrust blocks may be from a City-approved locally available source with a minimum compressive strength of 3,000 psi.
- B. See standard details

2.15 TRACER WIRE

- A. Tracer wire shall be "blue" HDPE insulated single strand #12 AWG continuous copper clad steel tracer wire. Tracer wire shall be manufactured by Copperhead Industries LLC or approved equal.

2.16 WARNING TAPE

- A. Warning tape shall be "blue" non-metallic, 3-inches wide and at least 5 mil thick. Warning tape shall have "Caution Buried Water Line" or similar warning printed on the tape. Tape shall be buried at least 2 feet above top of pipe.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.

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- B. Establish line and grade to maintain minimum burial and separation requirements in coordination with Enforcement Officer and Engineer. The minimum burial depth for water mains shall be 3.5 feet, unless otherwise approved by Enforcement Officer. Notify Enforcement Officer and Engineer if conflicts with existing utilities or structures exist.
- C. Prior to laying pipe, prepare trench subgrade and initial backfill in accordance with Section 01002 – Earthwork.
- D. Trench excavations shall be protected in accordance with applicable Federal, State, and local regulations, Laws, and rules in accordance with OSHA 29 CFR part 1926. Trench and excavation stability shall be the responsibility of the Contractor.
- E. All pipe, fittings, and joints shall be clean, and free of foreign debris. Pipe valves and fittings at existing line connections shall be swabbed with a 4 percent chlorine solution prior to connection.
- F. Exclude entrance of foreign material if work is suspended or stopped.
 - 1. Close ends of pipe with snug-fitting closures such as end caps.
 - 2. Do not let water fill the trench. Include provisions to prevent flotation if water control measures are inadequate.
 - 3. Remove water, sand, mud, and other undesirable material from trench before removal of end cap.

3.02 INSTALLATION

- A. Pipe Laying
 - 1. Perform only when weather and trench conditions are suitable. Do not lay in water.
 - 2. Remove trash, debris, vegetation, snow, ice, water or other unsatisfactory materials from excavations.
 - 3. All materials shall be carefully lowered into the trench using means and methods to prevent damage and entrance of foreign debris. Rolling or dropping materials will not be permitted. End hooks will not be permitted.
 - 4. Commence laying at the downstream end of line and install pipe with spigot ends in the direction of flow. Bells shall be in the direction of the laying operations.
 - 5. Open ends of water lines shall be adequately sealed to prevent intrusion of foreign debris during all work stoppages with a duration of 30 minutes or more.
- B. Jointing
 - 1. Join pipe in accordance with manufacturer's recommendations and AWWA specifications. Backfill in accordance with Section 01002 – Earthwork.
 - a. Clean and lubricate all joint and gasketed surfaces.
 - b. Employ means and methods to prevent damage during jointing.
 - c. Inspect joint openings and deflection for compliance with specifications.

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2. All joint deflections shall be within manufacturers recommendations.
 - a. Ductile iron pipe joint deflection shall conform to AWWA C600.
 - b. PVC pipe may be deflected a maximum of 1.5 degrees per 20 feet.
 3. Pipe expansion and contraction due to changes in temperature shall be monitored during construction. Previously joined pipe shall be inspected to ensure joints have not separated due to expansion and contraction.
- C. Restrained Joints
1. Restrained joints shall be provided at all fittings, including bends, tees, crosses, fire hydrants, caps, plugs, and all pipe specified for joint restraint.
 2. Restraint may be provided by properly designed thrust blocking, mechanical restraint, and bell harness restraint.
 3. See Standard Details.
- D. Cutting Pipe
1. Cut in neat manner without damage to pipe, even surfaces perpendicular to pipe centerline.
 2. Ductile iron and steel pipe to be cut with carbide or diamond tip blade saw or other approved methods.
 3. Remove burrs and sharp edges and smooth the pipe end by grinding.
 4. Repair lining where required and as approved.
- E. Closure Pieces
1. Connect two segments of pipeline or a pipeline segment and structure with short sections of pipe, fabricated for the purpose.
 2. Location of joints, types of joints, pipe materials and strength classifications shall comply with specifications.
 3. Sleeve couplings may be used:
 - a. Gaskets shall be at least 3 inches from pipe ends.
 - b. Spacer ring shall be identical to pipe end with clear space in closure less than ¼-inch.
- F. Valves and Valve Boxes
1. Valves and valve boxes shall be set plumb
 2. Valve box base section shall be centered over operating nut
 3. Valve box upper section shall be set flush with finish grade

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G. Polyethylene Encasement

1. When project specific specifications require use of polyethylene encasement, all valves and fittings shall be fully wrapped with polyethylene encasement in accordance with AWWA C105.

H. Casing Pipe

1. When typical trench-type construction techniques are used, subgrade preparation, bedding, initial backfill, and final backfill shall be in accordance with Standard Specification Section 01002 – Earthwork
2. When trenchless construction methods are used, installation shall be in accordance with Standard Specifications Section 01003 – Directional Drilling and Section 01004 – Utility Jacking and Boring

- I. Remove plugs from existing pipe to complete connections to existing pipe. Removed plugs shall become the property of the City.

J. Furnish and install test plugs where necessary to properly complete required testing.

1. Test plugs shall be as manufactured by pipe supplier.
2. Plugs shall be push-on, flanged, mechanical joint or restrained as required for ductile iron pipe and shall be watertight against heads equal to the specified test pressure. See Standard Details.
3. Secure plugs in place to facilitate removal when required to connect pipe.
4. Restrain plugs to fittings where indicated.

K. Tracer Wire

1. Attach continuous tracer wire to top of water line, either taped, banded, or strapped at 5 feet to 7 feet intervals. Install according to manufacturer's recommendations.
2. Tracer wire shall be looped to the surface at all valve/valve boxes, fire hydrants, blow-air release chambers, and locations specified or as shown on the plans.
3. Prior to acceptance, Contractor shall perform conductivity testing for all tracer wire. Full continuity must be established prior to final acceptance.

L. Warning Tape

1. Install continuous "blue" warning tape at least 2 feet above all water lines.

3.03 WATER MAIN PRESSURE TESTING

A. General

1. All work shall be inspected and approved by the Enforcement Officer prior to backfilling. Contractor shall notify the Enforcement Officer and arrange for inspection and observation of all testing prior to commencing.

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2. Contractor shall obtain approval from Enforcement Officer prior to making any connections to existing water lines. The Enforcement Officer or representative must be present during any connection activities. The Contractor shall coordinate connections with the Water Department.
3. The Contractor shall furnish all pumps, piping, labor and other materials and services necessary to bring the piping up to the specified test pressure. Pipe in the sections to be tested shall be sufficiently backfilled or center loaded, with thrust blocks installed.

B. Hydrostatic Pressure Test

1. After the pipe has been laid and partially backfilled, test connections shall be made, and the pipe filled with water. After all air removal, water shall be pumped in to bring the pipe to the specified pressure.
2. Unless otherwise specified, testing pressure shall be:
 - a. 1.5 times the normal operating pressure (for the lowest point on the pipe line).
 - b. At least 150 pounds per square inch (psi).
 - c. Less than the rated pipe working pressure shall be used for testing for a period of one hour.
3. Pressure test period shall be at least one hour at testing pressure.
4. Any cracked or defective system components observed during this test shall be repaired or removed and replaced to satisfaction of City.

C. Leakage Test

1. After successful pressure test, leakage testing shall be performed.
2. Leakage test shall be maintained for a period of at least 3 hours. The maximum operating pressure of the pipe shall be used as leakage test pressure. Pressure shall be based on the elevation of the lowest point in the section being tested, corrected to test gauge elevation. Applicable provisions of AWWA C600 and C605 shall apply.
3. Allowable leakage in gallons per hour shall not be greater than the leakage defined by the following formula:

$$L = \frac{S * D * \sqrt{P}}{148,000}$$

L = Leakage allowance make-up water) - gallons per hour (gph)

S = length of pipe tested - feet

D = nominal diameter of the pipe - inches

P = average test pressure during hydrostatic test - pound per square inch (gauge)

4. All visible leaks shall be repaired regardless of leakage allowance.
5. All exposed pipe, fittings, valves, hydrants and joints shall be inspected and all evidence of moisture appearing on the surface of the ground during the test shall be investigated by the Contractor. Should the leakage test results exceed allowable leakage, the test

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pressure shall be maintained for an additional period as directed by the City to facilitate location of leaks.

6. All pipe, fittings, valves, pipe joints, hydrants, and other materials which are found to be defective shall be removed and replaced with new, approved materials.
7. Pressure and leakage testing shall be repeated after repairing leaks and other defective work until results conform to specified requirements and approved by the City.

3.04 WATER MAIN DISINFECTION

- A. The Contractor shall furnish all pumps, piping, taps, labor and other materials and services necessary to perform work.
- B. One sampling tap shall be provided at the end of each line and a minimum of one tap per 1500 feet of pipe or as directed by the Enforcement Officer.
 1. Sampling tap shall be as shown in AWWA C651, Figure 1. Use of hose or fire hydrant for sample collection is not permitted.
 2. All disinfection, chlorination and flushing of the main will be done by the Contractor and in accordance with methods outlined in AWWA standard C651 – Disinfecting Water Mains.
 - a. Before being placed into service, all new mains and repaired portions of, or extensions to, existing mains shall be chlorinated so that the initial chlorine residual is greater than 50 mg/L and chlorine residual greater than 25 mg/L after 24 hours in the pipe.
 3. Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipe such that residual chlorine is less than 1 mg/L throughout the system or concentration directed by Enforcement Officer.
 4. Following disinfection and flushing, the Contractor will collect bacteriological samples. Water from the new main shall remain isolated from other waters of the City system and shall not be made available for consumption until bacteriological testing verifies acceptable water quality.
 - a. Bacteriological testing and sampling procedures will be in accordance with AWWA C651.
 - b. Testing shall verify water samples are free of coliform bacteria contamination and is equal to or better than water quality in the distribution system.
 - c. Water quality shall meet all drinking water standards of the Missouri Department of Natural Resources.

END OF SECTION 01001

SECTION 01002 EARTHWORK

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for earthwork, trenching, backfilling and compacting. The work shall consist of all labor, materials, and equipment required to install water main and appurtenances in accordance with contract documents, drawings, and specifications.
- B. The Contractor shall employ skilled, qualified workers and supervision to perform work following generally accepted industry practices. The City reserves the right to suspend work if, in the opinion of the Enforcement Officer, this requirement is not being met.
- C. If surface or ground contamination is suspected or encountered, notify the City immediately. The Developer and Contractor, in communication with the City, shall assess conditions and develop a plan for continued work including but not limited to: removal and disposal of contamination, specifying different sewer line materials, and line realignment.

1.02 DEFINITIONS

- A. City: City of Moberly, Missouri
- B. Water Department: City Water Department
- C. Enforcement Officer: City Director of Public Utilities or designated representative.
- D. Engineer: Licensed Professional Engineer in responsible charge for the project licensed to perform services in the State of Missouri.
- E. Developer: Entity requesting water service construction, modifications, extensions, or alterations to the City water system. The Developer could be a public or private entity, such as the City of Moberly or a private Developer.
- F. Contractor: Entity contracted by Developer to perform work on water main and services. The Contractor is responsible for constructing approved plans.
- G. Owner: Entity who is responsible for long term performance, maintenance, and operation of new water mains. The City will typically become the Owner upon final approval and acceptance by City. The Developer will be responsible for the project until final approval and acceptance.
- H. AWWA: American Water Works Association
- I. ASTM: American Society for Testing and Materials
- J. ANSI: American National Standards Institute
- K. MSS: Manufacturers Standardization Society of the Valve and Fitting Industry

1.03 RELATED WORK

- A. Section 01000 – Approval and Acceptance

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- B. Section 01005 - Pavement Repair
- C. Section 01006 - Seeding

1.04 REFERENCE STANDARDS

- A. ASTM D698 - Moisture-Density Relations of Soils and Soil Aggregate Mixtures, Using 5.5 lb. Rammer and 12-inch Drop.
- B. ASTM D6938 – Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (shallow depth).
- C. Missouri Standard Specification for Highway Construction.

1.05 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least five (5) business days prior to commencing work.

1.06 SUBMITTALS

- A. See Section 1000 – Approval and Acceptance.
- B. Work Plan detailing means, methods, equipment, sequencing, and schedule for Earthwork.
- C. Traffic control plan and required permits from jurisdictions having authority.

1.07 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Trenching, backfilling, and compacting shall be included in the Contract unit cost of water main pipe.
- C. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - PRODUCTS

- 2.01** Materials shall be in accordance with Contract Documents, plans, specifications, and approved submittals.

2.02 BEDDING AND INITIAL BACKFILL

- A. Granular bedding containing no clods, muck, sod, frozen material, roots or other deleterious material with a plasticity index not greater than 6 and meeting the following gradation requirements.

Sieve Size	Percent Passing
1.5 inch	100
#4	20-60
#200	0-6

2.03 FINAL BACKFILL

- A. **Excavation Spoils:** suitable silt, sand, gravel, lean clay or combinations thereof containing no clods, muck, organics, frozen material, or other deleterious material from excavations. Maximum particle size shall be 3 inches.
 - 1. If enough quantity of suitable materials is not available from excavation spoils, the Contractor shall identify and import suitable materials for backfill. Contractor shall dispose of all unsuitable material.
- B. **Select Granular Backfill,** Section 1010, Missouri Standard Specification for Highway Construction. Material shall meet the following gradation:

Sieve Size	Percent Passing
3 inches	100
#40	20-60
#200	0-6

2.04 AGGREGATE BASE AND SURFACE

- A. **Aggregate Base:** Type 5, Section 1007, Missouri Standard for Highway Construction.
- B. **Aggregate Surface:** Grade A or B, Section 1006, Missouri Standards for Highway Construction.

2.05 CONTROLLED LOW-STRENGTH MATERIAL (FLOWABLE FILL)

- A. Controlled Low-Strength Material: Self-compacting, flowable concrete material produced from the following:
 - 1. Portland Cement: ASTM C150/C150M, Type I or Type II.
 - 2. Fly Ash: ASTM C618, Class C or F.
 - 3. Normal-Weight Aggregate: ASTM C33/C33M, 3/4-inch nominal maximum aggregate size.
 - 4. Water: ASTM C94/C94M.
 - 5. Air-Entraining Admixture: ASTM C260/C260M.
- B. Produce conventional-weight, controlled low-strength material with 100-psi compressive strength when tested according to ASTM C495/C495M and placed in the field with a slump between 9 and 11 inches tested in accordance with ASTM C143.

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.
- B. Establish line and grade to maintain minimum burial and separation requirements in coordination with Enforcement Officer and Engineer. Notify Enforcement Officer and Engineer if conflicts with

existing utilities or structures exist.

- C. Trench excavations shall be protected in accordance with applicable Federal, State, and local regulations, Laws, and rules in accordance with OSHA 29 CFR part 1926. Trench and excavation stability shall be the responsibility of the Contractor.
- D. Implement and maintain traffic control plan

3.02 WATER CONTROL

- A. Develop and implement stormwater pollution prevention plan including erosion control measures. Prevent surface water and subsurface or ground water from entering excavations. The plan shall address water disposal if dewatering is required
- B. Water from surface runoff, downspouts, and subsurface drains shall be managed and controlled by the Contractor through an approved site drainage system. Equipment and materials required to remove water from excavations shall be on-site and available for uses throughout construction.
- C. Water disposal shall be the responsibility of the Contractor and completed in accordance with applicable federal, state, and local regulations.

3.03 PREPARATION

- A. Clear and grub areas of excavation.
- B. Backfilling and compaction shall not occur until the following conditions are satisfied:
 - 1. Subgrade proof-compacting, required inspection, testing and acceptance by Enforcement Officer.
 - 2. Soft, rutting, pumping, frozen or otherwise unsuitable soils in base of excavations shall be removed at direction of Enforcement Officer. Notify Enforcement Officer once subgrade elevations are reached. Excavate unsuitable soils within directed limits and replace with suitable materials approved by Enforcement Officer. Suitable materials could include but are not limited to bedding, initial backfill, and final backfill.
 - 3. All trash, debris, vegetation, snow, ice, water or other unsatisfactory materials shall be removed from excavations.

3.04 EXCAVATION

- A. Excavate trenches to approved subgrade elevations. Unless otherwise specified, the minimum trench width shall be at least one (1) foot greater than the outside diameter of the pipe.
- B. If rock is encountered, it shall be excavated at least 12 inches wider than the outside diameter of the pipe and at least 6 inches deeper than planned subgrade elevation. Alternatively, pipe alignment and grade could be adjusted to avoid rock excavation if separation, burial, and joint restraint requirements are satisfied. If additional excavation is required, bedding material shall be used as backfill.
 - 1. For City projects, notify Enforcement Officer and Engineer immediately if rock is encountered within excavation limits, and earthwork progress significantly slows or stops. Excavation in rock shall not progress unless approved by Enforcement Officer. The Enforcement Officer will provide guidance and specifications for rock excavation and backfilling on a case by case basis.

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- 2. For City projects, unless identified as a bid item, additional cost for rock excavation will be paid for as additional work in accordance with Contract Documents regarding changes in work.
- C. Stockpile materials acceptable for use as backfill and topsoil. Stockpile locations relative to excavations shall be incorporated into Contractor’s responsibility for excavation stability. Place, grade, and shape stockpiles to promote positive drainage with adequate erosion control. Dispose unsuitable materials.

3.05 BACKFILLING

- A. Proof-compact subgrade prior to placing bedding or laying pipe. Proof-compacting shall be performed in the presence of Enforcement Officer; approval is required before placing bedding to receive pipe.
- B. Shape and compact bedding to provide uniform bearing of the pipe. Excavate bell holes to allow for unobstructed assembly of the joint. Make bell hole as small as practical. After the joint has been made, carefully fill bell hole with bedding material and compact.
- C. After pipe laying, joining and aligning, place and compact bedding and initial backfill as shown on the plans. Ensure material is worked under the haunch of the pipe to provide adequate side support. Take precautions to prevent movement of the pipe during placement and compaction of haunching material.
- D. Place and compact initial backfill to provide cover over the pipe. Use methods to prevent pipe damage or displacement.
- E. In unpaved areas, place final backfill using methods to prevent pipe damage or displacement. Place final backfill in 6-inch loose lifts and compact. Leave material neatly mounded over the trench. Maintain trench and fill settled areas as they occur. Finish grade to eliminate uneven areas. Seed areas where required.
- F. In paved areas, place and compact base and surface repairs in accordance with details and project specification Section 01005 - Pavement Repair. Place final backfill using methods to prevent pipe damage or displacement.
- G. Jetting or water-settling backfill is prohibited, unless permitted by Enforcement Officer and Engineer.

3.06 COMPACTION

- A. Compact materials in accordance with ASTM D698 and ASTM 6938 and according to the following table:

Material	Minimum Compaction	Maximum Loose Lift Thickness
Bedding and Initial Backfill	90%	4 inches
Suitable Excavation Spoils	90%	6 inches
Select Granular Backfill	95%	6 inches
Aggregate Base	95%	6 inches
Aggregate Surface	95%	6 inches
Bituminous Surface	98%	3 inches

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- B. Moisture condition (wetting or drying) fill as needed to achieve optimum moisture contents and required compaction.
- C. Use compaction equipment capable of achieving required densities and avoid damage to pipe, adjacent utilities, and adjacent structures. Self-propelled, "heavy" roller or pad type vibratory rollers shall not be operated within 2 feet from top of pipe.

3.07 QUALITY CONTROL

- A. Compaction quality control shall be provided by Contractor and will be incidental to Contract Unit costs. Quality control technicians and testing organizations shall be trained and certified to perform required testing in accordance with ASTM standards and specifications.
- B. Quality control density testing frequency shall be in accordance with the following table:

Material	Testing Frequency per lift
Bedding and Initial Backfill	One test every 300 linear feet of trench
Suitable Excavation Spoils	One test every 300 linear feet of trench
Select Granular Backfill	One test at each pavement structure crossing
Aggregate Base	One test at each pavement structure crossing
Aggregate Surface	One test at each pavement structure crossing
Bituminous Surface	One test at each pavement structure crossing

- C. Areas where testing indicates insufficient compaction shall be re-compacted, re-conditioned, re-worked until requirements are met to satisfaction of Owner and Engineer.
- D. Controlled low strength material shall be tested in the field for slump and samples collected for comprehensive strength testing. Slump and comprehensive testing shall be in accordance with ASTM C143 and ASTM C495, respectively. Testing frequency shall be 1 set of tests per 100 cubic yards of material used. Slump shall be between 9 and 11 inches. Minimum compressive strength is 100 psi.

3.08 MAINTENANCE

- A. The Contractor will demobilize equipment and restore the work site to the original condition. Backfill excavations and restore surfaces according to specifications and project drawings.
- B. Remove all leftover materials, including unsuitable excavation spoils, trash, debris, and other construction waste in accordance with applicable federal and state laws and regulations.
- C. Protect newly graded areas from traffic (except pavement crossings) and erosion. Keep free of trash and debris See Section 01005- Pavement Repair for pavement area maintenance.
- D. Repair and re-establish grades in settled, eroded and rutted areas to specified tolerances during warranty period and to satisfaction of Enforcement Officer.
- E. Where differential movement is measurable or observable along excavated areas during general project warranty period, remove surface (pavement, lawn, or other finish), add appropriate backfill material, compact, and replace surface treatment according to project specifications and plans. Restore appearance, quality, and condition of surface or finish to match adjacent work to satisfaction of Enforcement Officer.

END OF SECTION 01002

SECTION 01003 DIRECTIONAL DRILLING

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for directional drilling installation methods for High Density Polyethylene (HDPE) pipe casing or steel pipe casing beneath traveled ways or at locations shown on the drawings. The Contractor shall provide all labor, materials, and equipment required to install casing in accordance with these specifications.

1.02 SUBMITTALS

- A. Submit work plans, shop drawings, and product data for approval. Submittals shall include:
1. Detailed work plan and sequencing including procedures and schedule;
 2. Proposed line and grade of casing pipe to maintain minimum burial depth, minimum separation requirements from existing utilities, and radius of curvature;
 3. Proposed equipment including but not limited to: drilling rig, rotary torque capacity, thrust/pullback pressures, tensile load limit calculations, drill bits, mud system including pump and motor size, down-hole tools, guidance system with stated accuracy, and safety systems;
 4. Pit locations;
 5. Design, means, methods and materials for pit excavation support;
 6. Pit dimensions showing relative location to traveled ways;
 7. Dewatering methods;
 8. Spoil removal methods;
 9. Drilling fluids including water source;
 10. Methods for monitoring drill fluid volumes and losses;
 11. Product data;
 12. Casing pipe material and size;
 13. Casing pipe segment joining methods and procedures;
 14. Product pipe spacers and casing pipe end seal materials;
 15. Erosion control and stormwater pollution prevention plan;
 16. Adverse conditions plan:
 - a. Plan shall address means and methods of work, especially HDPE fusion welding, in adverse conditions such as freezing temperatures, precipitation, and wind and mitigation measures to eliminate resulting effect on pipe fusion and installation;
 17. Remediation plan:
 - a. Identify means and methods to remove obstructions at the boring face;
 - b. Identify remedial measures for mitigating damage to existing facilities, and impacts to traveled ways, including ground subsidence and heaving;
 - c. Identify remedial measures for excessive drill fluid loss;
 18. Experience:
 - a. Submit a list of at least five (5) successfully completed directional drilling projects using HDPE pipe sizes of at least 18 inches and lengths greater than 150 feet within the last five (5) years. Include project owner contact information references substantiating Contractor's experience; and,
 19. As-Built Drawings showing horizontal and vertical alignment of completed casing installation. This submittal shall also include pullback pressure logs, volume of drilling fluid, and fluid losses, if any.

1.03 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least two (2) business days prior to commencing work. All work shall be performed in the presence of the Enforcement Officer.

1.04 BASIS OF PAYMENT

- A. Directional drilling shall be paid for by the lineal footage of casing installed along casing centerline. The unit price shall include:
 - 1. Excavation, use, and backfilling of all pits;
 - 2. Removal and disposal of spoils and drilling fluid;
 - 3. Traffic control;
 - 4. Verifying location and depth of all utilities within impacted area;
 - 5. Casing pipe installation; and,
 - 6. All labor, equipment, and materials required to complete the work.
- B. The unit cost shall be for casing pipe and shall not include product pipe and installation.
- C. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
- D. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 – PRODUCTS

2.01 HIGH DENSITY POLYETHYLENE PIPE CASING

- A. Materials shall be in accordance with Contract Documents, plans, specifications, and approved submittals.
- B. All HDPE shall be manufactured from PE 4710 resin listed as TR-4 by the Plastic Pipe Institute (PPI). The resin shall meet ASTM D3350 with a minimum 445474C cell classification. The manufacturer shall certify the specified cell classification.
- C. HDPE casing shall conform to ASTM F 714, ANSI and AWWA C906, and have an NSF-61 listing.
- D. All pipe, fittings, and fusion equipment shall be provided by one supplier. Fusion equipment must be in satisfactory working order. All fusion equipment operators shall be qualified to perform heat fusing procedures.

2.02 STEEL PIPE CASING

- A. Materials shall be in accordance with approved submittals.

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- B. Steel casing pipe shall meet or exceed ASTM A-139, Grade B with a minimum wall thickness of 0.25 inches and minimum yield strength of 35,000 psi. Steel casing shall be joined by fully welding around the entire circumference of the pipe. Welding shall conform to AWWA Standard C206.

2.03 CASING END SEALS

- A. Synthetic rubber end seals shall be installed on each end of the casing pipe. End seals shall be Advanced Model Products – Model AC Pull-on or approved equal and fastened tightly with stainless steel bands.

2.04 INSULATING SPACERS

- A. Projection type, non-metallic spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer’s product data for spacer type and size.

2.05 DIRECTIONAL DRILLING EQUIPMENT

- A. Directional drilling equipment shall consist of a hydraulically-powered directional drilling rig of sufficient capacity to perform the bore and pullback the casing pipe, a drilling fluid mixing, delivery and recovery system of sufficient capacity to successfully complete the crossing, a drilling fluid recycling system to remove solids from the drilling fluid, a guidance system to accurately guide boring operations, a vacuum truck of sufficient capacity to handle drilling fluid volume, and qualified personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of this project.
- B. The directional drilling rig shall consist of a hydraulically powered system to rotate, push and pull hollow drill pipe into the ground at a variable angle while recirculating pressurized drilling fluid mixture to a guidable drill head. The rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be electrically grounded during drilling and pull-back operations. There shall be a system to detect electrical current from the drill string and an audible alarm that automatically sounds when an electrical current is detected.
- C. Drilling fluid shall be composed of clean water and appropriate bentonite clay additives in accordance with approved submittals. Water shall be from source approved by Enforcement Officer and be contaminant free. Drilling fluids shall be thoroughly mixed and free of clumps or clods.

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor’s expense.
- B. Construction means, methods, and materials shall be in accordance with approved submittals.
- C. Entry and exit pit excavations shall be constructed in accordance with approved submittals. Excavations should be protected in accordance with applicable Federal, State, and Local regulations, laws, and rules. Excavation protection shall not be less than the standards and regulations established by OSHA 29 CFR Part 1926. Trench safety and stability shall be the responsibility of the Contractor, including placement of excavation spoils and control of water intrusion.

3.02 HANDLING OF MATERIAL

- A. Handle pipes, conduits, casing, and ancillary items in such a manner as not to damage the material. Pipe rollers or other approved means shall be used during pullback operations to avoid damage to casing pipe and product pipe.
- B. Damage to material shall be repaired to the satisfaction of the Enforcement Officer and, if required, replaced.
- C. The Enforcement Officer maintains the authority to reject materials damaged or otherwise unsuitable for project use.

3.03 DRILLING FLUID

- A. Disposal of drilling fluid and spoils will be the responsibility of the Contractor and shall be done in compliance with all Federal, State, and local regulations.
- B. All drilling fluids and loose cuttings shall be contained in access pits or holding tanks for recycling and disposal. Drilling fluid returns into or on other areas shall be cleaned up and disposed of immediately. The Contractor shall notify the Enforcement Officer immediately if drilling fluid returns occur or are spilled in areas other than approved holding structures.
- C. The Contractor shall provide adequate means and equipment for removing drilling fluid and spoils from access pits to mitigate potential overflows and provide for final disposal. Disposal equipment shall be present during all directional drilling operations.

3.04 DIRECTIONAL DRILLING

- A. Perform directional drilling operations in accordance with approved submittals. The Contractor shall provide all material, equipment, and facilities required to perform directional drilling.
- B. The drill path shall be accurately staked with alignment and entry/exit pits.
- C. Pipe, conduit, and casing installation under traveled ways shall progress on a continuous basis without stoppage, except for adding sections, until the leading edge has reached the receiving pit. Engineering approval is required for variations from this specification.
- D. Stop operations if ground movement is detected and implement the remediation plan in accordance with approved submittals. Immediately report movement to the Enforcement Officer. Repair any damages to traveled ways, including displacement (up or down) resulting from construction operations. Corrective actions shall be approved by the responsible authority. Mitigating repairs and associated costs will be the responsibility of the Contractor.

3.05 PILOT HOLE BORING

- A. The entry angle, pilot hole, and boring process shall maintain a curvature that does not exceed allowable bending radius of casing or product pipe and in accordance with approved submittals.
- B. The pilot hole shall be drilled along the Contractor submitted, and approved line, grade, and radius of curvature. No curves will be accepted with a radius more than approved curvature.
- C. Drilling fluid pressures shall be monitored at all times during operations. Pressures shall be controlled to avoid hydraulic fracturing of subsurface materials and prevent structure and ground surface heaving.

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- D. Drilling fluid and cutting return shall be monitored at all times during operations. The volume of drilling fluids and spoil return anticipated shall be estimated based on subsurface conditions encountered. Excessive drilling fluid loss or excess spoil return shall be reported immediately to the Enforcement Officer. The Enforcement Officer will, in consultation with the Contractor, determine if corrective actions are required.
- E. Contractor shall provide adequate containment, drilling fluid and spoil removal equipment and other means required to contain all fluid and spoils and/or remove it from site. No additional compensation will be allowed for containment or cleanup resulting from spillage, hydraulic fracturing, or other means leading to release of drilling fluids.
- F. Alignment Adjustments and Restarts
 - 1. The Contractor shall follow the approved alignment within specifications. If adjustments or restarts are required, the Contractor shall notify the Enforcement Officer for approval prior to adjusting.

3.06 CASING PIPE INSTALLATION

- A. After the pilot hole is completed and approved, the enlarging phase of installation shall begin. The borehole diameter shall be increased to accommodate the pullback operations for the specified casing pipe size. The type of reamer shall be determined by subsurface soil conditions encountered during pilot hole drilling. The reamer type shall be selected by the Contractor and must be equipped with a swivel.
- B. The maximum hole diameter shall be 1.25 times the casing pipe outside diameter. The Contractor may elect to perform multiple reaming passes. Multiple reaming passes will be completed at Contractor's expense.
- C. Borehole stability shall be the responsibility of the Contractor. Open boreholes shall be stabilized using appropriate means to prevent collapse while still maintaining ability to perform work.
- D. Once pullback operations have commenced, operations must continue without interruption until pipe is completely pulled into borehole. During pullback operations, Contractor will not apply more than the maximum safe pipe pull pressure at any time. If casing pipe becomes stuck, Contractor will cease pulling operations and allow any potential "suction lock" to subside and resume pulling operations. If pipe remains stuck, Contractor will notify Engineer. Engineer and Contractor will review available options and proceed accordingly.
- E. Drilling fluid pressures shall be monitored at all times during operations. Pressures shall be controlled to avoid hydraulic fracturing of subsurface materials and avoid structure and ground surface heaving. Contractor shall provide adequate containment, drilling fluid and spoil removal equipment and other means required to contain all fluid and spoils and/or remove it from site. No additional compensation will be allowed for containment or cleanup resulting from spillage, hydraulic fracturing, or other means leading to release of drilling fluids.
- F. Drilling fluid and cutting return shall be monitored at all times during operations. The volume of drilling fluids and spoil return anticipated shall be estimated based on subsurface conditions encountered. Excessive drilling fluid loss or excess spoil return shall be reported immediately to the Enforcement Officer. The Enforcement Officer will, in consultation with the Contractor, determine if corrective actions are required.
- G. The casing pipe shall be protected and supported during pullback operations using rollers or other approved means to minimize damage.

3.07 OBSTRUCTIONS

- A. The Enforcement Officer must be notified immediately if any obstruction is encountered that stops progress of operations. The Contactor shall review the situation with the Enforcement Officer and determine the feasibility of continuing drilling operations, switching to alternative methods, and/or modifying alignment/location of the jack and bore.
- B. If continuing is deemed unfeasible or impractical, the obstructed pilot hole or casing shall be abandoned in place and filled completely with grout or other approved materials.
- C. For City projects, substantiated cost of abandoned work resulting from unforeseen obstructions encountered will be paid for as additional work in accordance with Contract documents.

3.08 ALIGNMENT

- A. The Contractor shall provide an accurate means to monitor horizontal and vertical positions of the casing during construction operations. The Enforcement Officer shall always have access to this information during the directional drilling process. If a magnetic guidance system is used, the Contractor shall identify any surface geo-magnetic anomalies and take appropriate corrective measures to ensure accurate spatial tracking of the drill stem.
- B. The casing shall be installed within a tolerance of 6 inches from approved, line and grade over 100 feet. The tolerance will be adjusted proportionally for shorter or longer casing lengths; however, the maximum deviation for casing lengths longer than 150 feet shall be no more than 1 foot.
- C. The alignment of casing shall be established to allow unrestricted insertion of the product pipe, including spacers, pipe bells, and restrained joints. If product pipe cannot be installed, the casing shall be abandoned and filled with grout or other approved materials. The Contractor shall establish another casing at a location approved by Enforcement Officer.

3.09 PRODUCT PIPE INSTALLATION

- A. The product pipe shall be the size and type as specified or shown on the plans.
- B. The end of product pipe shall be protected from damage during installation into the casing.
- C. Product pipe shall have restrained joints within the casing.
- D. The product pipe shall be supported in the casing pipe using projection-type non-metallic casing spacers.
 - 1. The minimum number of spacer projections around the product pipe circumference shall equal the pipe diameter (i.e. a nominal 10-inch pipe shall have minimum of 10 projections). Refer to manufacturer's product data for spacer type and size.
 - 2. Casing spacers shall fasten tightly onto the product pipe to prevent movement during installation.
 - 3. The insulator spacing shall be installed to support the weight of the product pipe and contents. Spacers shall be placed a maximum of 2 feet from each side of a joint and evenly spaced along the product pipe at intervals not to exceed manufacturer's recommendations or 6 feet, whichever is less.
 - 4. Double spacers shall be installed one foot from each end of the casing.
 - 5. Projection type spacers shall be RACI, Advance Products & Systems, or approved equal.

3.10 SITE RESTORATION

- A. The Contractor will demobilize equipment and restore the work site to the original condition. All excavations will be backfilled according to specifications and project drawings. Surface restoration shall be completed in accordance with Section 01005 – Pavement Repair and Section 01006 - Seeding.
- B. Remove all excess spoils and dispose of in accordance with all federal, state, and local regulations.

END OF SECTION 01003

SECTION 01004 UTILITY JACKING AND BORING

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for jack and bore installation of steel casing beneath traveled ways. The Contractor shall provide all labor, materials, and equipment required to install casing in accordance with these specifications. This work shall consist of pushing/jacking a steel casing pipe with a boring auger rotating within the pipe to remove spoils as casing is advanced.

1.02 SUBMITTALS

- A. Submit work plans, shop drawings, and product data for Engineer approval. Submittals shall include:
1. Work plan and sequencing;
 2. Proposed line and grade of casing pipe to maintain minimum burial depth and separation requirements from existing utilities;
 3. Equipment and site configuration;
 4. Jacking and receiving pit locations;
 5. Design, means, methods and materials for pit excavation support;
 6. Pit dimensions showing relative location to traveled ways;
 7. Dewatering methods;
 8. Differential movement monitoring methods;
 9. Excavation face loss prevention methods;
 10. Spoil removal methods;
 11. Drilling fluids;
 12. Product data;
 13. Casing pipe material and size;
 14. Casing pipe segment joining methods and procedures;
 15. Product pipe spacers and casing pipe end seal materials;
 16. Erosion control and stormwater pollution prevention plan;
 17. Remediation plan:
 - a. Identify means and methods to remove obstructions at the boring face;
 - b. Identify remedial measures for mitigating damage to existing facilities, and impacts to traveled ways, including ground subsidence and heaving;
 18. Experience:
 - a. Submit a list of at least five (5) successfully completed jack and bore projects greater than 50 feet within the last five (5) years including project owner contact information references substantiating jack and bore installer's experience; and,
 19. As-Built Drawings showing horizontal and vertical alignment of completed jack and bore.

1.03 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least two (2) business days prior to commencing work. All work shall be performed in the presence of the Enforcement Officer.

1.04 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.

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- B. Jack and Bore shall be paid for by the lineal footage of casing measured along casing centerline. The unit price shall include:
 - 1. Excavation, use, and backfilling of all pits;
 - 2. Removal and disposal of spoils and drilling fluid;
 - 3. Traffic control;
 - 4. Verifying location and depth of all utilities within impacted area;
 - 5. Casing pipe installation; and,
 - 6. All labor, equipment, and materials required to complete the work.
- C. The unit cost shall not include product pipe and installation.
- D. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
- E. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials shall be in accordance with Contract Documents, plans, specifications, and approved submittals.
- B. Steel casing pipe shall meet or exceed ASTM A-139, Grade B with a minimum wall thickness of 0.25 inches and minimum yield strength of 35,000 psi. Steel casing shall be joined by fully welding around the entire circumference of the pipe. Welding shall conform to AWWA Standard C206.
- C. Synthetic rubber end seals shall be installed on each end of the casing pipe. End seals shall be Advanced Model Products – Model AC Pull-on or approved equal fastened tightly with stainless steel bands.
- D. Projection type spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.
- B. Construction means, methods, and materials shall be in accordance with approved submittals.
- C. Excavations shall be constructed in accordance with approved submittals. Excavations should be protected in accordance with applicable Federal, State, and local regulations. Excavations must meet or exceed regulations established by OSHA 29 CFR Part 1926. Trench safety and stability shall be the responsibility of the Contractor.

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- D. Disposal of excess spoils removed from the casing pipe shall be the responsibility of the Contractor and shall be done in compliance with all Federal, State, and local regulations.

3.02 HANDLING OF MATERIAL

- A. Handle pipes, conduits, casing, and ancillary items in such a manner as not to damage the material.
- B. Damage to material shall be repaired to the satisfaction of the Engineer or replaced at Contractor's expense.
- C. The Enforcement Officer maintains the authority to reject materials damaged or otherwise unsuitable for project use.

3.03 JACK AND BORE

- A. Perform jack and bore operations in accordance with approved submittals and the following requirements:
 - 1. Unsupported excavation (open-hole) ahead of the casing will not be permitted. Mechanical arrangements or other devices shall be provided at the leading end of the carrier to prevent drilling ahead of the casing.
 - 2. The use of water or slurry under pressure (jetting) or puddling shall not be permitted to facilitate boring, pushing, or jacking operations. Non-pressurized water or slurry is acceptable for use as a lubricant behind the cutter head.
 - 3. Pipe, conduit, and casing installation under traveled ways shall progress on a continuous basis without stoppage, except for adding sections, until the leading edge has reached the receiving pit. Engineering approval is required for variations from this specification.
- B. Employ methods to prevent loss of the excavation face in accordance with approved submittals.
- C. Stop operations if ground displacement is detected and implement the remediation plan in accordance with approved submittals. Repair any damages to traveled ways, including displacement (up or down) resulting from construction operations. Corrective actions shall be approved by the Engineer. Mitigating repairs and associated costs will be the responsibility of the Contractor.

3.04 OBSTRUCTIONS

- A. The Enforcement Officer must be notified immediately if any obstruction is encountered that stops progress of operations. The Contractor shall review the situation with the Enforcement Officer and determine the feasibility of continuing operations, switching to alternative methods, and/or modifying alignment/location of the jack and bore.
- B. If continuing is deemed unfeasible or impractical, the obstructed pilot hole or casing shall be abandoned in place and filled completely with grout or other approved materials.
- C. For City projects, substantiated cost of abandoned work resulting from unforeseen obstructions encountered will be paid for as additional work in accordance with Contract documents.

3.05 ALIGNMENT

- A. The Contractor shall provide an accurate means to monitor horizontal and vertical positions of the casing during construction operations. The Enforcement Officer shall always have access to this information during the jack and bore process. If a magnetic guidance system is used, the Contractor shall identify any surface geo-magnetic anomalies and take appropriate corrective measures to ensure accurate spatial tracking of casing.
- B. The casing shall be installed within a tolerance of 1 foot of approved line and grade over 100 feet. The tolerance may be adjusted proportionally for shorter or longer casing lengths; however, the maximum deviation for casing lengths longer than 150 feet shall be no more than 1.5 feet.
- C. The alignment of casing shall be established to allow unrestricted insertion of the product pipe, including spacers, pipe bells, and restrained joints. If product pipe cannot be installed, the casing shall be abandoned and filled with grout or other approved materials. The Contractor shall establish another casing at a location approved by Enforcement Officer.

3.06 PRODUCT PIPE INSTALLATION

- A. The product pipe shall be the size and type as specified or shown on the plans.
- B. The end of product pipe shall be protected from damage during installation into the casing.
- C. Product pipe shall have restrained joints within the casing.
- D. The product pipe shall be supported in the casing pipe using projection-type non-metallic casing spacers.
 - 1. The minimum number of spacer projections around the product pipe circumference shall equal the pipe diameter (i.e. a nominal 10-inch pipe shall have minimum of 10 projections). Refer to the manufacturer's product data for spacer type and size.
 - 2. Casing spacers shall fasten tightly onto the product pipe to prevent movement during installation.
 - 3. The insulator spacing shall be installed to support the weight of the product pipe and contents. Spacers shall be placed a maximum of 2 feet from each side of a joint and evenly spaced along the product pipe at intervals not to exceed manufacturer's recommendations or 6 feet, whichever is less.
 - 4. Double spacers shall be installed one foot from each end of the casing.
 - 5. Projection type spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.

3.07 SITE RESTORATION

- A. The Contractor will demobilize equipment and restore the work site to the original condition. All excavations will be backfilled according to specifications and project drawings. Surface restoration shall be completed in accordance with contract requirements, Section 01005 – Pavement Repair, and Section 01006 – Seeding.

END OF SECTION 01004

SECTION 01005 PAVEMENT STRUCTURE REPAIR

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for repairing and restoring aggregate, concrete, and asphalt concrete pavement structures in areas where trenches cross these features. The Contractor shall provide all labor, materials, and equipment required to perform work in accordance with these specifications.

1.02 RELATED WORK

- A. Section 01002 – Earthwork
- B. Section 01003 – Directional Drilling
- C. Section 01004 – Utility Jacking and Boring

1.03 REFERENCE STANDARDS

- A. ASTM D698 - Moisture-Density Relations of Soils and Soil Aggregate Mixture, using 5.5 lb. Rammer and 12 in Drop.
- B. Missouri State Highway and Transportation Commission: Missouri Standard Specifications for Highway Construction, current edition, including Section 613 Pavement Repair

1.04 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Pavement Structure Repair shall be paid for by the lineal foot at Contract unit cost for surfaces listed on bid form and plan quantities table. Culvert, mailbox, or other surface features required to be removed as a result of construction shall be included in Contract unit cost.
- C. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
- D. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - MATERIALS

2.01 AGGREGATE BASE AND SURFACE COURSE MATERIALS

- A. Aggregate Base: Type 5, Section 1007, Missouri Standard Specifications for Highway Construction.
- B. Aggregate Surface: Grade A or B, Section 1006, Missouri Standard Specifications for Highway Construction.

2.02 BITUMINOUS SURFACE COURSE AND PATCHING MATERIALS

- A. Prime Coat: Liquid Asphalt RC-MC Grade 30, Section 1015, Missouri Standard Specifications for Highway Construction.
- B. Base Mix: MoDOT Base, Section 401, Missouri Standard Specifications for Highway Construction.
- C. Tack Coat: SS-1 or SS-1H, Section 1015 Missouri Standard Specifications for Highway Construction.
- D. Surface Mix: Type BP-1, Section 401, Missouri Standard Specifications for Highway Construction.

2.03 PORTLAND CEMENT CONCRETE

- A. Portland Cement: Type I or Type II
- B. Concrete Mix: Portland Cement Concrete Base and Pavement, class B-1, non-air entrained with material conforming to Section 502 and 1000, Missouri Standard Specifications for Highway Construction with a slump between 3 and 6 inches.
- C. Water: potable
- D. Reinforcement: #4 rebar placed 12 inches on center each way. Concrete shall be dowelled into existing with drilled and epoxy set #4 rebar dowels placed 18 inches on center.

PART 3 - EXECUTION

3.01 REPAIR

- A. All trenches in traveled ways shall be repaired with either Bituminous Surface Course and Patching Materials or Concrete Material according to standard details.
- B. All trenches in concrete sidewalk, driveways and roadways shall be repaired/replaced with concrete material according to standard details.
- C. All trenches in aggregate surfaced pavement structures shall be replaced with Aggregate Base and Surface Course according to standard details.
- D. Pavement replaced shall adhere to the following procedures:
 - 1. Place granular backfill to provide temporary surface over trenches across traveled ways. Open to traffic for at least one week. Repair all potholes and level surface daily, adding additional material as needed. Base under the pavement shall be 8 inches thick.
 - 2. After pavement has been open to traffic for one week, saw cut and remove existing pavement on both sides of trench, remove enough base course material, level, compact, and construct pavement patch per the project details.

3.02 COMPACTION

- A. In accordance with Section 01002 Earthwork.

3.03 MAINTENANCE

- A. Maintain surface repairs until final acceptance. Replace and repair areas where excessive displacement, rutting, raveling, or other unacceptable damages occur as a result of construction.
- B. Repaired areas will be accepted at end of maintenance period and all pavement repairs are performing well without further damages.

END SECTION 01005

SECTION 01006 SEEDING

PART 1 – GENERAL

1.01 RELATED WORK

- A. Section 01002 - Earthwork
- B. Section 01003 – Directional Drilling
- C. Section 01004 – Utility Jacking and Boring

1.02 REFERENCE STANDARDS

- A. Missouri Standard Specification for Highway Construction, current edition.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Deliver grass seed in original containers showing analysis of seed mixture, percentage of pure seed, year of production, net weight, date of packaging, and location of packaging. Damaged packages are not acceptable.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.04 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Seeding cost shall be included in Contract unit cost for product pipe.

PART 2 - MATERIALS

2.01 SEED

- A. Seed shall meet the following minimum percentages for purity and germination, and maximum percentage for weed seed. Vendor certification for each lot number of numbers with testing statement. Seed that has not been tested and certified within the last 1 year will be rejected

Type	Purity	Germination	Weed
Kentucky Blue Grass	85	80	<1.0
Perennial Rye	98	85	<1.0
Red Fescue	97	85	<1.0

2.02 FERTILIZER

- A. Standard commercial fertilizer supplied separately or in mixtures and furnished in water tight containers. Each container shall be marked with weight and manufacturer's guaranteed analysis showing ingredient percentages.
- B. Furnish a mixture of chemical ingredients providing total nitrogen, phosphoric acid, and potassium required based on soil analysis or as otherwise specified. Chemical ingredient tolerances shall be within 2 percent.

2.03 MULCH

- A. Fresh wheat, rye, or oat straw, air dried. Non-toxic to vegetation and to the germination of seed, free from noxious seeds and weed seeds.

2.04 APPLICATION RATES

- A. **Fertilizer:** provide total nitrogen, phosphoric acid, and potassium required based on soil analysis or as otherwise specified.

- B. **Seed**

- 1. Kentucky Blue Grass: 1.10 lbs/1,000 sq. ft.
 - 2. Perennial Rye: 0.60 lbs/1,000 sq. ft.
 - 3. Redtop: Red Fescue: 0.40 lbs/1,000 sq. ft.

PART 3 - EXECUTION

3.02 PREPARATION

- A. When soil is in a tillable condition, cultivate to a depth of 4 inches, reducing soil particles to a size not larger than 2 inches. Moisture condition surface to receive seed.
- B. Assure seed bed is level, smooth, and free of weeds, clods, stones, roots, and sticks. Moisture condition as needed.
- C. Apply fertilizer and mix into the top 2 inches of soil. Apply within 48 hours prior to seeding.

3.03 SEEDING AND MULCHING

- A. Uniformly sow seeds in two operations at right angles to each other. Within 12 hours after seeding roll areas at right angles to runoff with a lawn type roller. Do not over compact.
- B. Within 24 hours of seeding apply mulch at 2 1/2 tons per acre. Stabilize vegetative mulch by embedding in soil to prevent mulch loss by wind or water erosion.

3.04 MAINTENANCE

- A. Maintain surfaces until final acceptance and supply additional topsoil, seed, and fertilizer where necessary, including areas affected by erosion.
- B. Replant damaged grass areas showing root growth failure, deterioration, bare or thin spots, and eroded areas.
- C. Seeded areas will be accepted at end of maintenance period when seeded areas are properly established and otherwise acceptable.

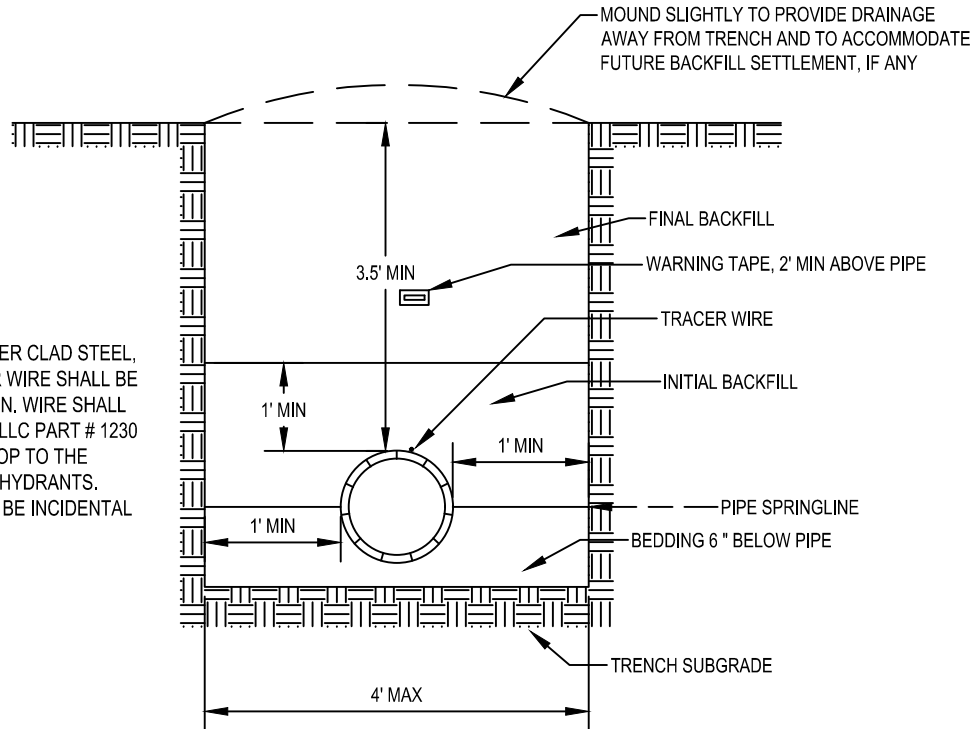
END OF SECTION 01006

**CITY OF MOBERLY, MISSOURI
STANDARD SPECIFICATIONS FOR WATER MAIN CONSTRUCTION**

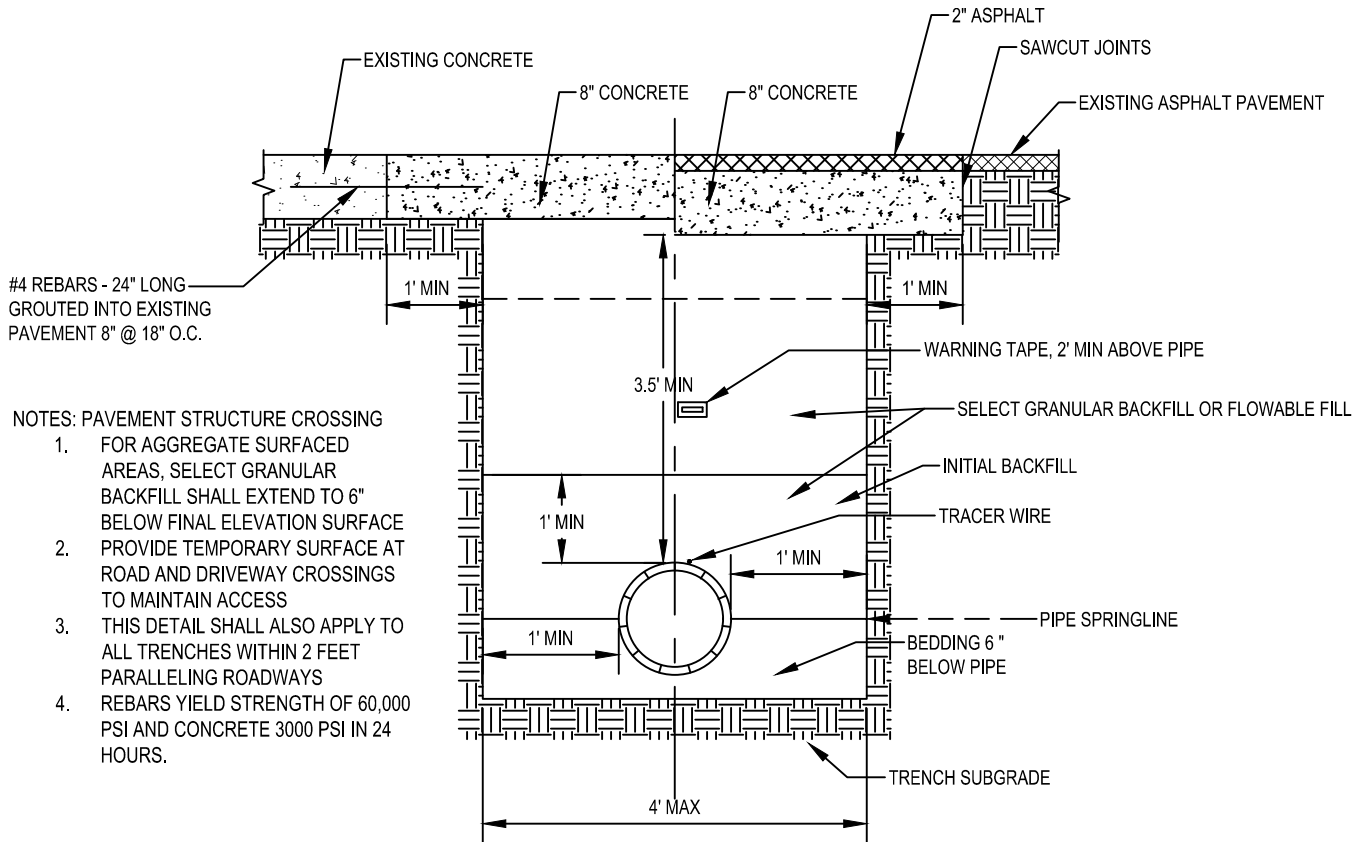
SECTION 2 – STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

02001	Typical Water Main in Trench Installation
02002	Typical Fire Hydrant, Valve, and Valve Box
02003	Typical Hydrant and Valve Locations
02004	Typical Thrust Block Installations
02005	Typical Restrained Joint Installation
02006	Typical Water Main Creek Crossing
02007	Typical Water Main in Casing Installations
02008	Typical Service Connection and Meter Setting
02009	Typical Water Main Separation Requirements

TRACER WIRE SHALL BE COPPER CLAD STEEL, CCS, (12 GAUGE AWG) TRACER WIRE SHALL BE ATTACHED TO THE WATER MAIN. WIRE SHALL BE COPPERHEAD INDUSTRIES LLC PART # 1230 HS OR EQUAL, WIRE SHALL LOOP TO THE SURFACE AT ALL VALVES AND HYDRANTS. COST OF TRACER WIRE SHALL BE INCIDENTAL TO UNIT COST OF PIPE.



WATER MAIN IN TRENCH TYPICAL INSTALLATION DETAIL- SEEDED SOIL SURFACE



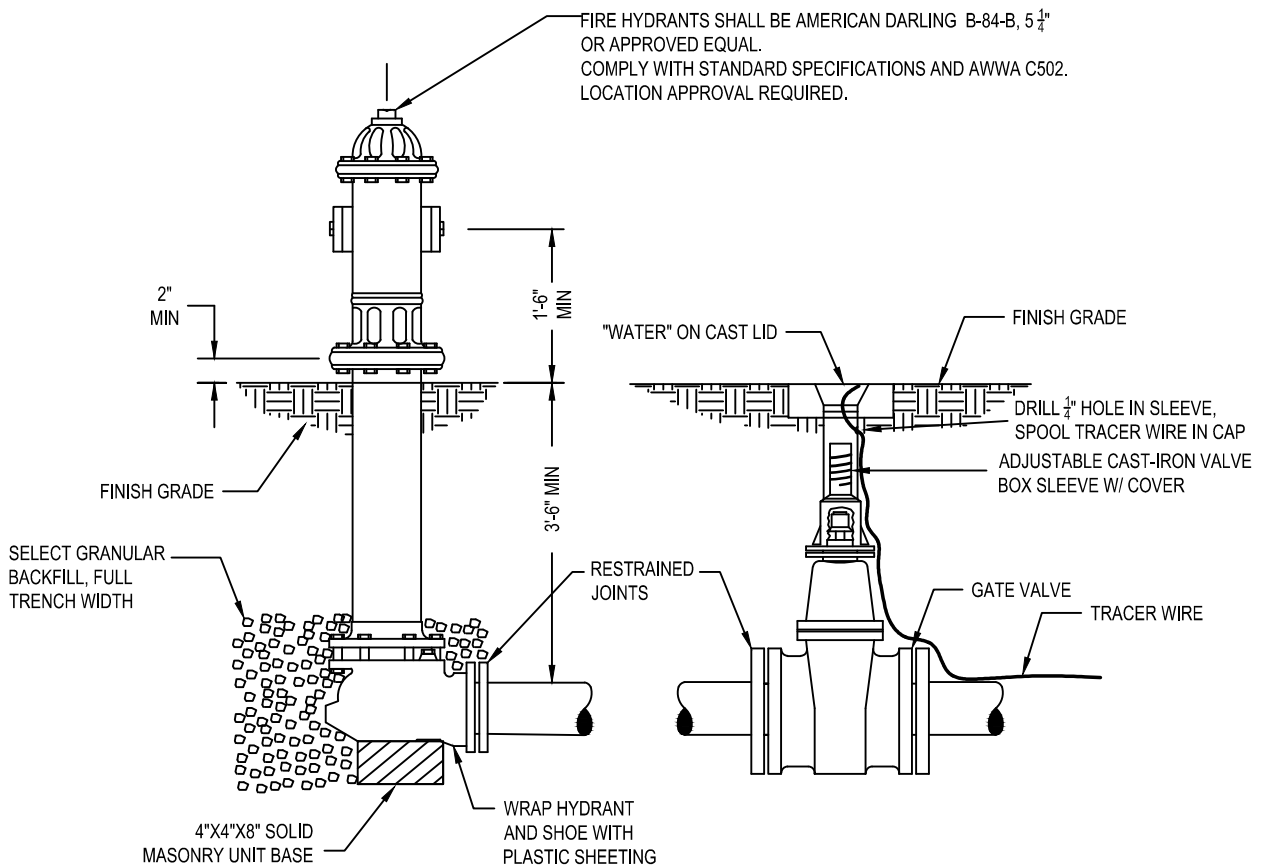
- NOTES: PAVEMENT STRUCTURE CROSSING
1. FOR AGGREGATE SURFACED AREAS, SELECT GRANULAR BACKFILL SHALL EXTEND TO 6" BELOW FINAL ELEVATION SURFACE
 2. PROVIDE TEMPORARY SURFACE AT ROAD AND DRIVEWAY CROSSINGS TO MAINTAIN ACCESS
 3. THIS DETAIL SHALL ALSO APPLY TO ALL TRENCHES WITHIN 2 FEET PARALLELING ROADWAYS
 4. REBARS YIELD STRENGTH OF 60,000 PSI AND CONCRETE 3000 PSI IN 24 HOURS.

TYPICAL TRENCH INSTALLATION DETAIL-PAVEMENT STRUCTURE CROSSINGS

STANDARD DETAIL 02001
TYPICAL WATER MAIN IN TRENCH INSTALLATIONS
CITY OF MOBERLY - WATER MAIN CONSTRUCTION

10-08-2019

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FIRE HYDRANT ASSEMBLY, COMPLETE
NO SCALE

VALVE & VALVE BOX DETAIL
NO SCALE

STANDARD DETAIL 02002
TYPICAL FIRE HYDRANT, VALVE & VALVE BOX
CITY OF MOBERLY - WATER MAIN CONSTRUCTION

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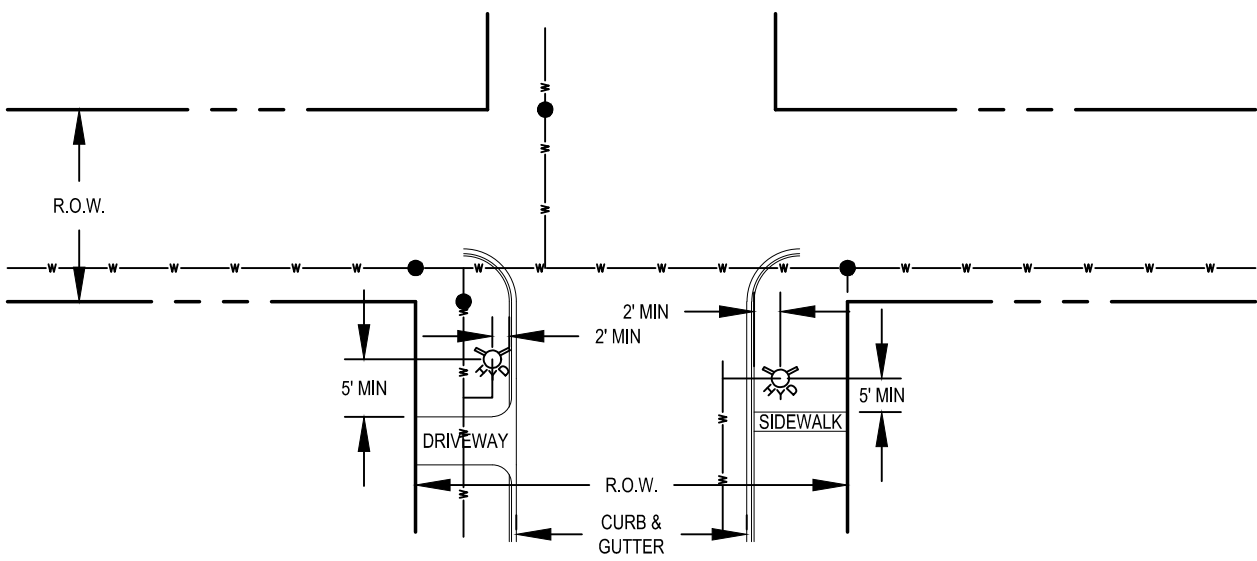
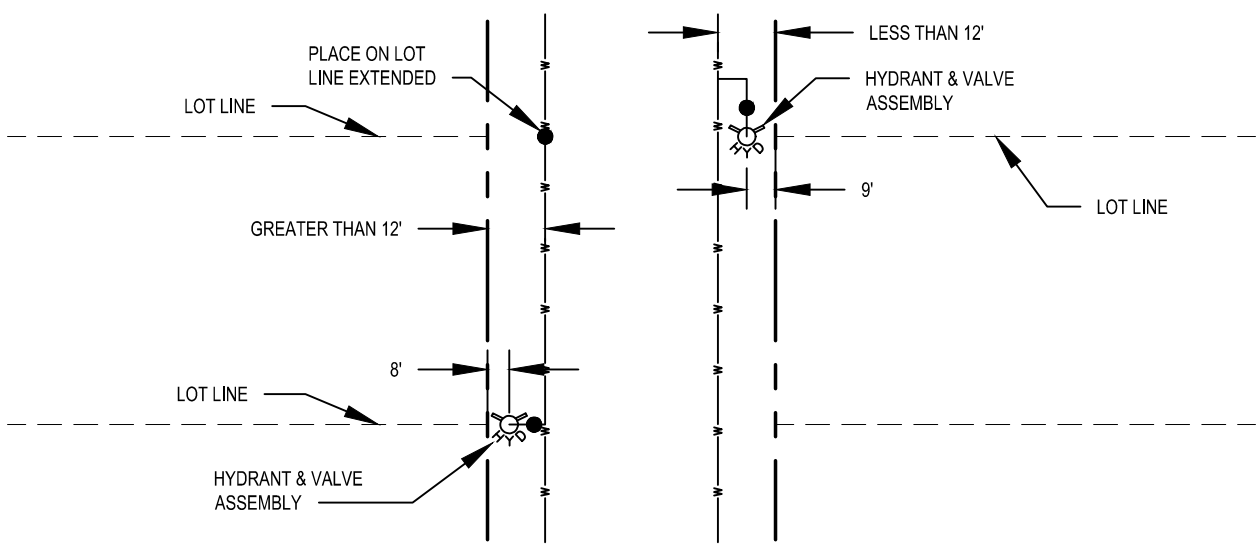
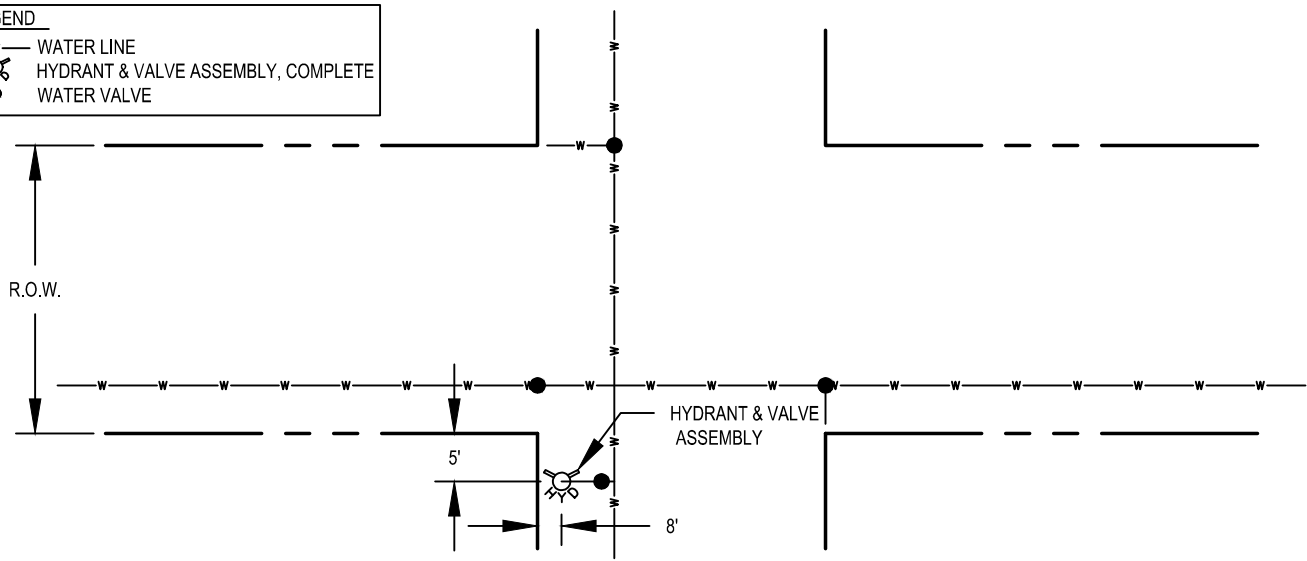
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LEGEND

- W — WATER LINE
- ⊗ HYDRANT & VALVE ASSEMBLY, COMPLETE
- WATER VALVE



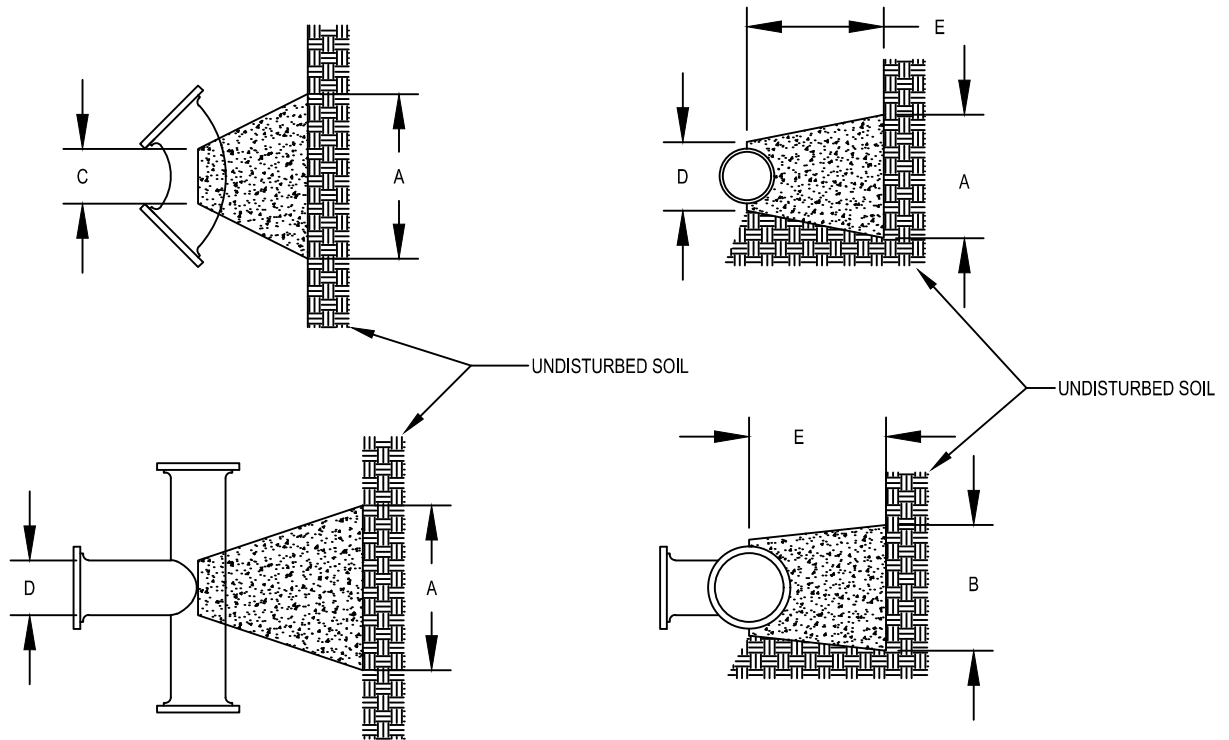
STANDARD DETAIL 02003
 TYPICAL FIRE HYDRANT AND VALVE LOCATIONS
 CITY OF MOBERLY - WATER MAIN CONSTRUCTION
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PIPE SIZE	FITTING	DISTANCE IN INCHES				
		A	B	C	D	E
6"	11.25 & 22.5°	12	12	8	10	12
	45°	27	12	8	10	12
	90°	33	18	8	10	12
	TEE/PLUG	24	18	8	10	12
8"	11.25 & 22.5°	18	15	8	10	12
	45°	33	15	8	10	18
	90°	42	24	8	10	18
	TEE/PLUG	30	24	12	10	18
10" & 12"	11.25 & 22.5°	27	24	12	12	18
	45°	51	24	12	12	24
	90°	63	36	12	12	30
	TEE/PLUG	45	36	12	12	24
14" & 16"	11.25 & 22.5°	33	33	12	16	18
	45°	69	33	12	16	30
	90°	84	48	12	16	36
	TEE/PLUG	60	48	12	15	30

NOTES: MANUFACTURED RESTRAINT IS THE CITY PREFERRED METHOD OF RESTRAINT. SEE STANDARD SPECIFICATIONS.
 CONCRETE THRUST BLOCKING MAY BE USED IN CONJUNCTION WITH MANUFACTURED RESTRAINTS.

1. THRUST BLOCKS ARE BASED ON A WORKING PRESSURE OF 200 P.S.I. & 2000 P.S.F. ALLOWABLE SOIL BEARING PRESSURE.
2. USE DIMENSIONS FOR NEXT LARGER SIZE FOR PIPE SIZES NOT SHOWN .
3. USE 3/8" PLYWOOD SEPARATOR BETWEEN BLOCKS AND PLUGS FOR EASE OF FUTURE REMOVAL.

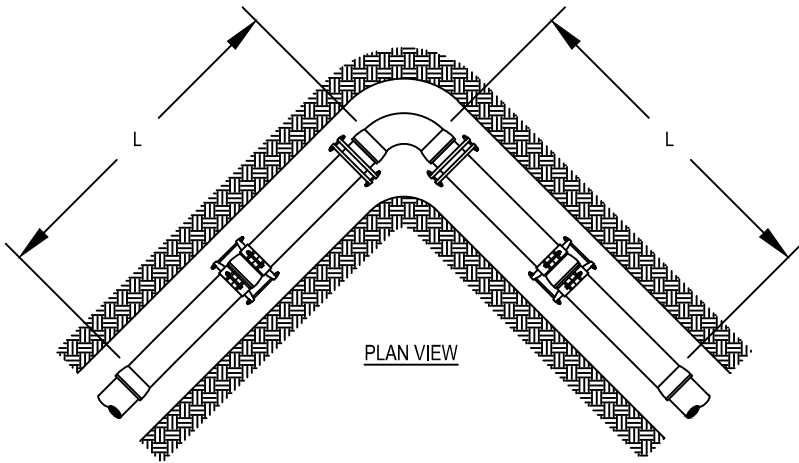


CONCRETE THRUST BLOCK DETAIL
 NOT TO SCALE
 DETAIL E

STANDARD DETAIL 02004
 TYPICAL THRUST BLOCK INSTALLATION
 CITY OF MOBERLY - WATER MAIN CONSTRUCTION

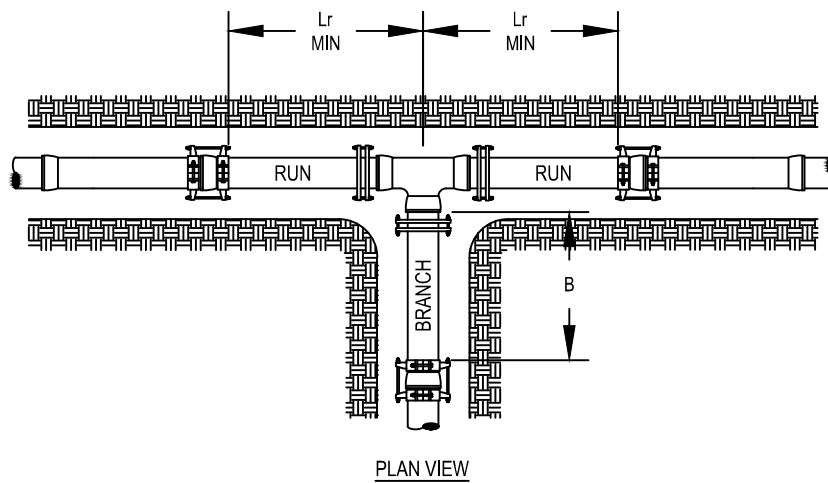
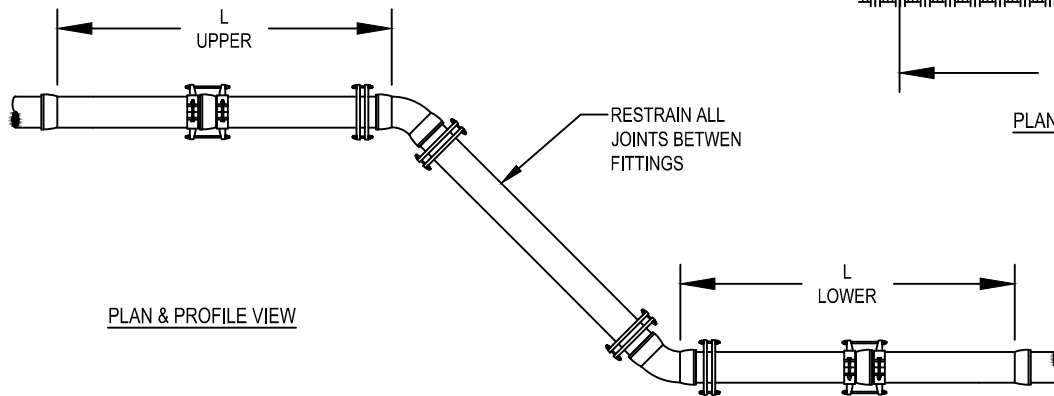
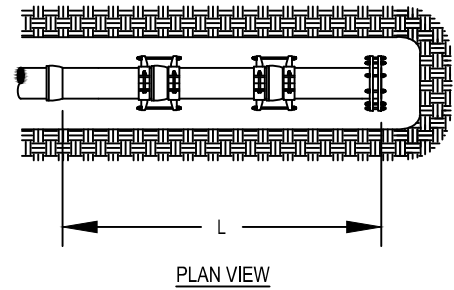
10-08-19

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NOTES:

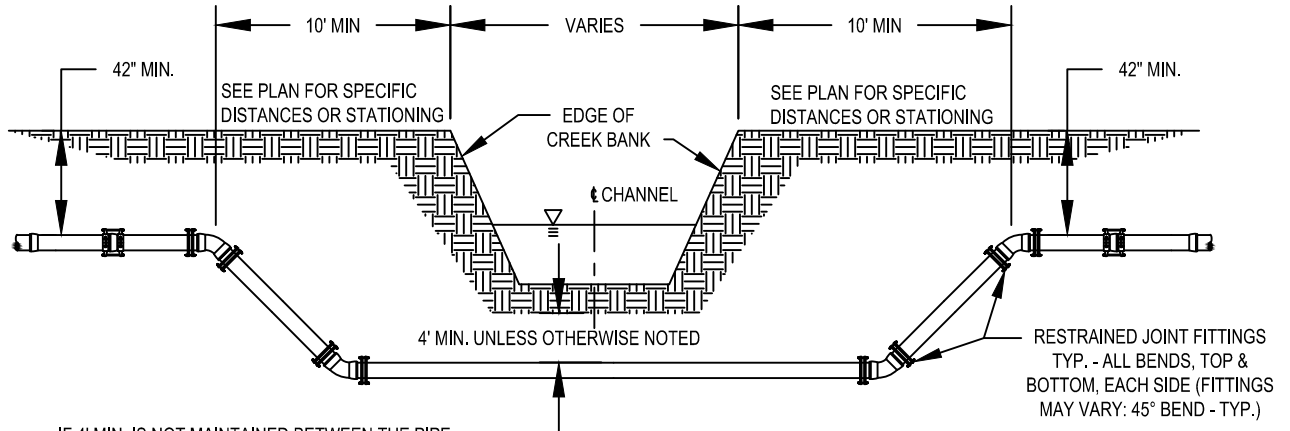
1. ALL JOINTS WITHIN LENGTH "L" OF FITTING MUST BE RESTRAINED
2. LENGTHS L, L_r, AND B TO BE SPECIFIED BY ENGINEER



STANDARD DETAIL 02005
 TYPICAL RESTRAINED JOINT INSTALLATION
 CITY OF MOBERLY - WATER MAIN CONSTRUCTION

10-08-2019

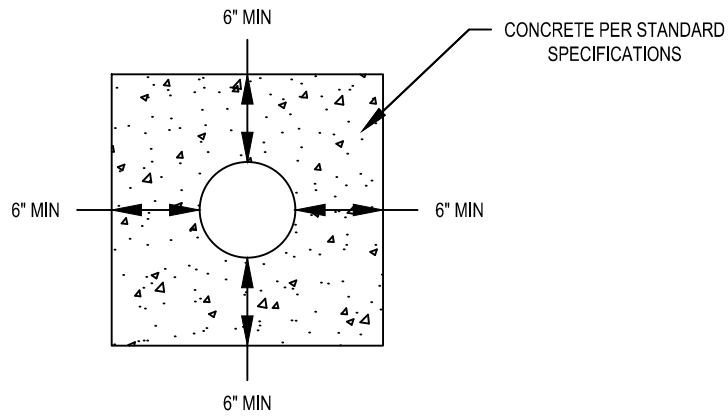
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IF 4' MIN. IS NOT MAINTAINED BETWEEN THE PIPE AND CHANNEL BOTTOM, PIPE MUST BE ENCASED IN CONCRETE FROM 10' EACH SIDE OF CREEK BANK.

NOTE: STREAM BANKS SHALL BE PROTECTED AT ALL STREAM AND CHANNEL CROSSINGS. SEE PROJECT SPECIFIC REQUIREMENTS.

CHANNEL CROSSING DETAIL
NOT TO SCALE

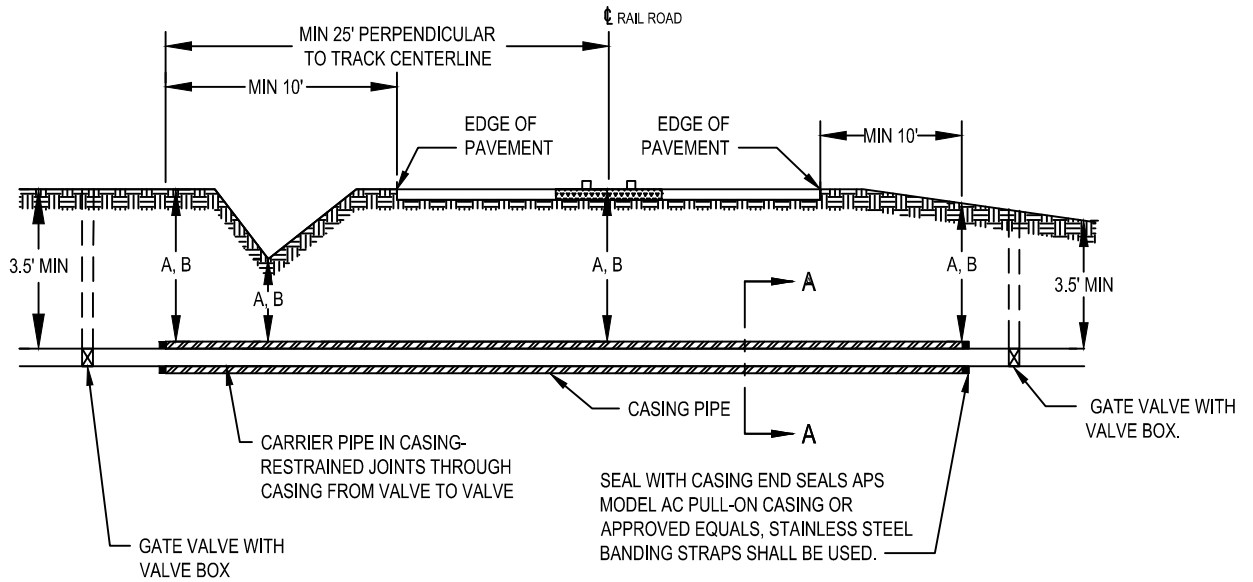


CONCRETE ENCASEMENT DETAIL
NOT TO SCALE

STANDARD DETAIL 02006
TYPICAL WATER MAIN CREEK CROSSING
CITY OF MOBERLY - WATER MAIN CONSTRUCTION

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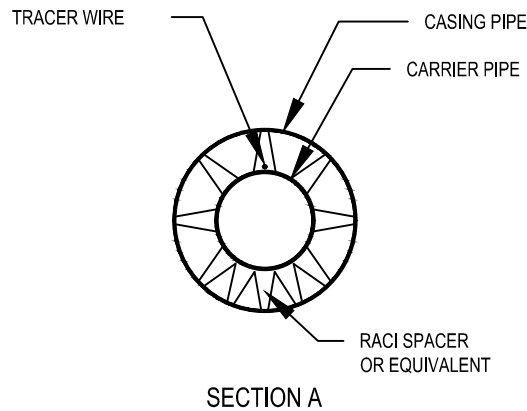


NOTES:

1. CONTRACTOR MEANS AND METHODS FOR TRENCHLESS CONSTRUCTION METHOD MUST BE APPROVED.
2. IF DIRECTIONAL DRILLING METHOD IS USED, THE MINIMUM EMBEDMENT DEPTH TO TOP OF FINISHED CASING SHALL BE 8 FEET.
3. SEE STANDARD SPECIFICATIONS FOR ALLOWABLE CASING PIPE MATERIALS.
4. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND APPROVALS FROM APPROPRIATE REGULATORY AUTHORITY. ALL WORK SHALL MEET ALL REQUIREMENTS OF RESPONSIBLE REGULATORY AUTHORITY
5. CASING SPACERS SHALL BE RACI OR APPROVED EQUAL WITH STAINLESS STEEL BOLTS AND NUTS. CASING SPACERS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED MANUFACTURER'S SPECIFICATIONS OR 6' WHICHEVER IS LESS. DOUBLE SPACERS SHALL BE INSTALLED 1' FROM EACH END OF THE CASING. ONE CASING SPACER MUST BE WITHIN 2' OF EACH SIDE OF A PIPE JOINT. SPACERS SHALL HAVE A MINIMUM HEIGHT THAT EXCEEDS THE PIPE BELL HEIGHT AND RESTRAINED JOINT HEIGHT.
6. ALL JOINTS BETWEEN GATE VALVES SHALL BE RESTRAINED JOINTS.

NOTES:

- A. MINIMUM COVER OVER CASING FOR ROADWAY CROSSINGS SHALL BE 4 FEET WITHIN LIMITS SHOWN
- B. MINIMUM COVER OVER CASING FOR RAILWAY CROSSING SHALL BE 6 FEET WITHIN LIMITS SHOWN
- C. COVER DEPTH GREATER THAN MINIMUMS MAY BE REQUIRED AS A CONDITION OF AUTHORITY HAVING JURISDICTION FOR ROAD OR RAILROAD

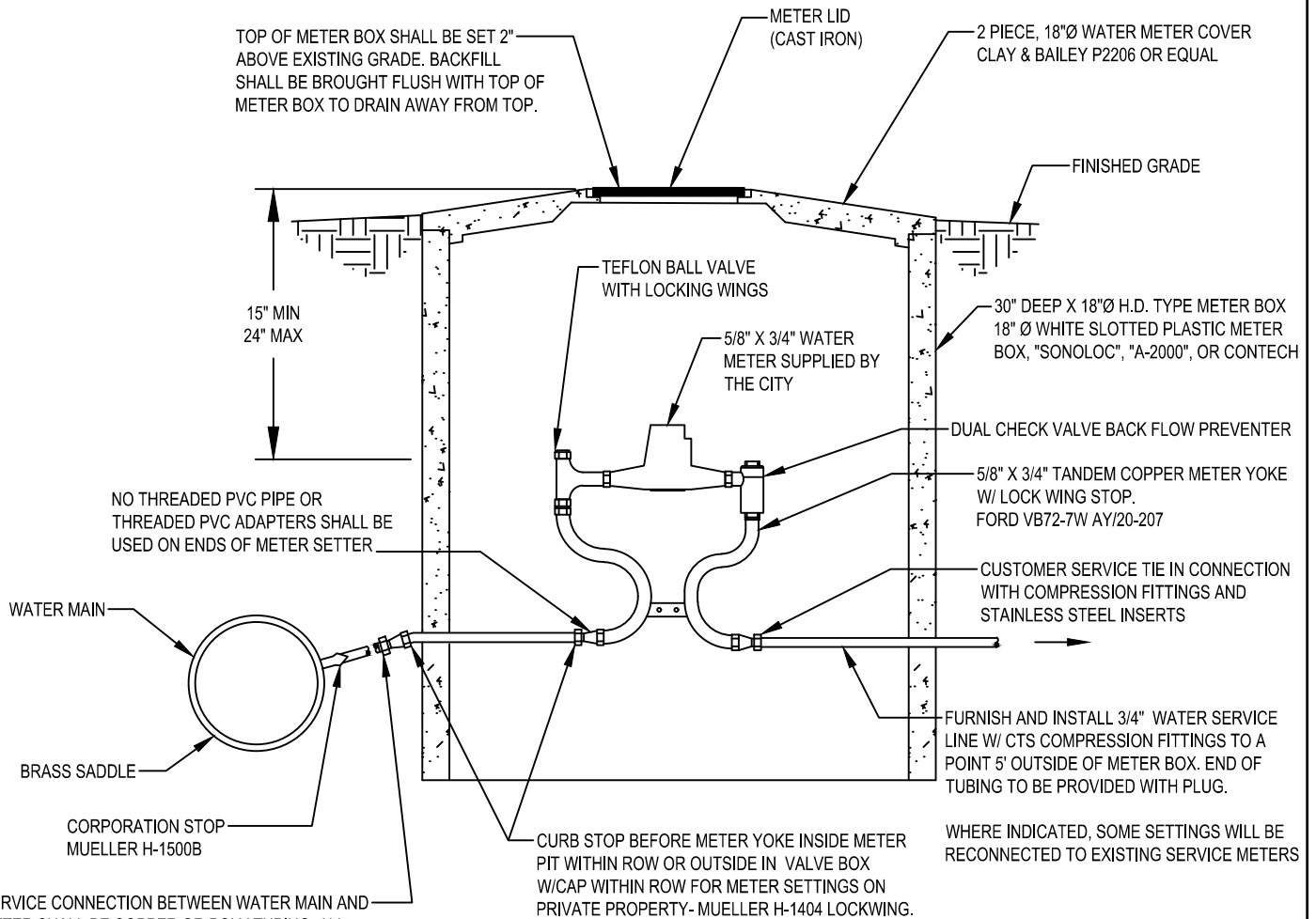


STANDARD DETAIL 02007
 TYPICAL WATER MAIN IN CASING
 CITY OF MOBERLY - WATER MAIN CONSTRUCTION

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NOTES: ALL SERVICE LINES GREATER THAN 10' IN LENGTH REQUIRES TRACER WIRE.
WARNING TAPE SHALL BE PLACED OVER ALL SERVICE LINES CONSTRUCTED.



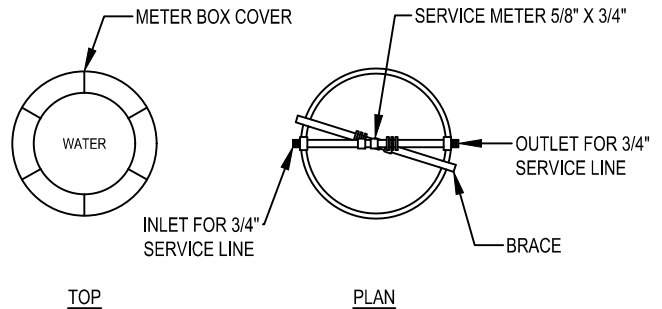
SERVICE CONNECTION BETWEEN WATER MAIN AND METER SHALL BE COPPER OR POLY TUBING. ALL COPPER LINES INSTALLED IN GRANULAR MATERIAL SHALL BE CASED. ALL POLY SERVICE LINES BETWEEN WATER MAIN AND METER SHALL BE CASED WITH TRACER WIRE. SADDLE CORPORATION STOPS SHALL HAVE STAINLESS STEEL STRAPS OR BE ALL BRASS

ON 1 1/2" OR LARGER SETTINGS A CURB STOP IS REQUIRED ON BOTH SIDES OF METER.

TYPICAL 5/8" X 3/4" METER SETTING AND SERVICE CONNECTION
NOT TO SCALE

IN SOME INSTANCES, METER SETTINGS, GREATER THAN 3/4" X 5/8" MAY BE SPECIFIED. 1" SETTINGS SHALL UTILIZE THE SAME CONFIGURATION SHOWN FOR 3/4" X 5/8" SETTINGS. 1 1/2" AND 2" METER SETTINGS SHALL BE INSTALLED IN 30" DIA. X 36" PVC METER WELLS W/APPROPRIATE SETTER OR TUBE RISERS INCORPORATING ANGLE VALVE (W/PADLOCK WINGS) ON THE INLET.

ADDITIONAL BRACING SHALL BE PROVIDED AS REQUIRED FOR METER SUPPORT. CAST IRON METER COVER AND LID SHALL BE INSTALLED FOR THE SPECIFIC METER WELL DIAMETER. CUSTOMER SERVICE LINE SIZED TO MATCH THE SPECIFIC METER REQUIREMENTS SHALL BE INSTALLED TO A POINT 1'-0" OUTSIDE OF THE METER WELL. ALL METERS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR EXCEPT WHERE OTHERWISE NOTED ON THE PLANS.

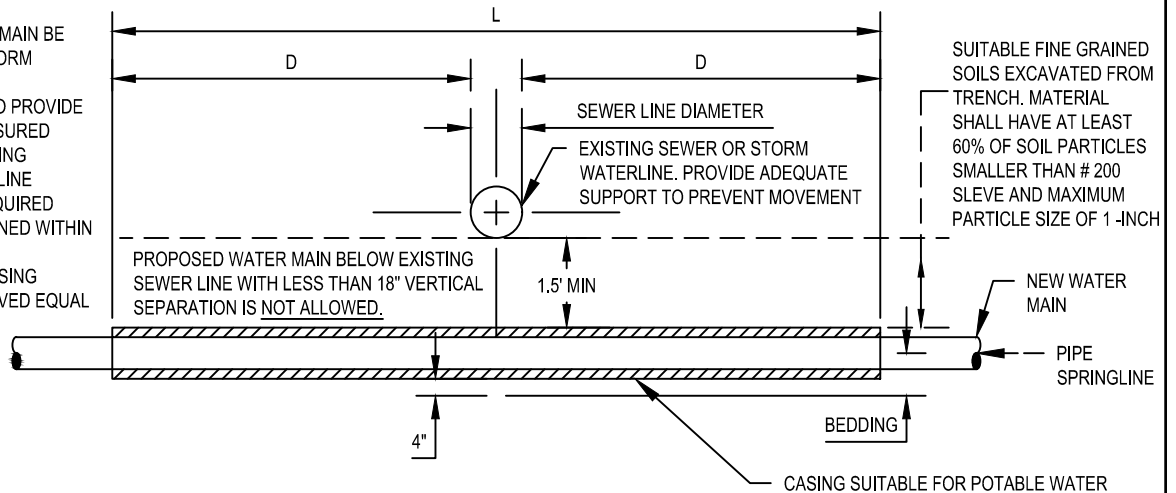


STANDARD DETAIL 02008
TYPICAL SERVICE CONNECTION AND METER SETTING
CITY OF MOBERLY - WATER MAIN CONSTRUCTION

10-08-2019

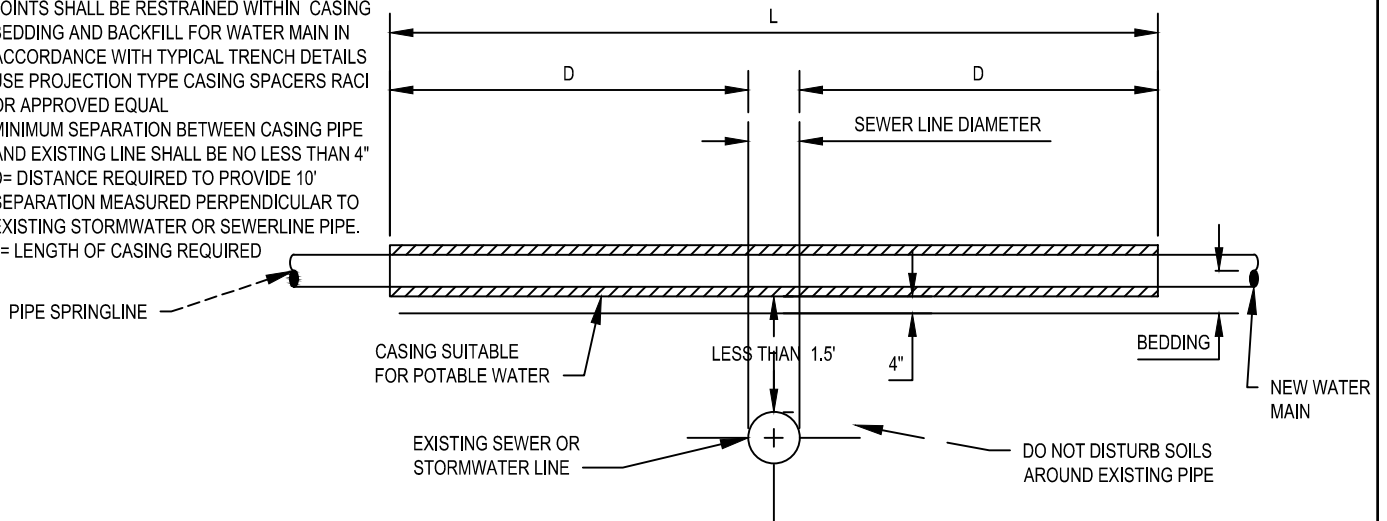
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1. BACKFILL FROM 1' ABOVE PIPE UP TO SURFACE IN ACCORDANCE WITH TYPICAL TRENCH DETAILS
2. IN NO CASE SHALL WATER MAIN BE LESS THAN 1.5' BELOW STORM WATER OR SEWER LINE
3. D= DISTANCE REQUIRED TO PROVIDE 10 FEET SEPARATION MEASURED PERPENDICULAR TO EXISTING STORMWATER OR SEWER LINE
4. L= LENGTH OF CASING REQUIRED
5. JOINTS SHALL BE RESTRAINED WITHIN CASING
6. USE PROJECTION TYPE CASING SPACERS, RACI OR APPROVED EQUAL



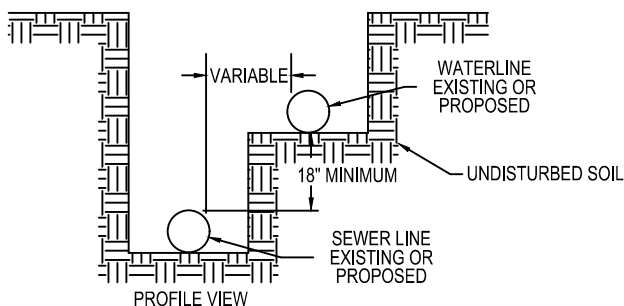
PROPOSED WATER MAIN BELOW EXISTING STORMWATER OR SEWERLINE

1. JOINTS SHALL BE RESTRAINED WITHIN CASING
2. BEDDING AND BACKFILL FOR WATER MAIN IN ACCORDANCE WITH TYPICAL TRENCH DETAILS
3. USE PROJECTION TYPE CASING SPACERS RACI OR APPROVED EQUAL
4. MINIMUM SEPARATION BETWEEN CASING PIPE AND EXISTING LINE SHALL BE NO LESS THAN 4"
5. D= DISTANCE REQUIRED TO PROVIDE 10' SEPARATION MEASURED PERPENDICULAR TO EXISTING STORMWATER OR SEWERLINE PIPE.
6. L= LENGTH OF CASING REQUIRED

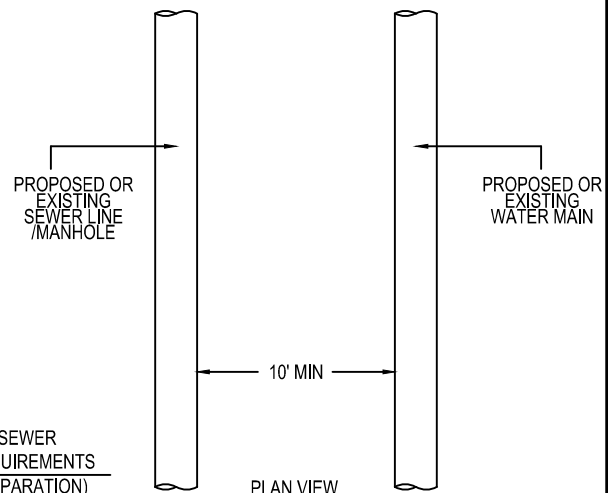


PROPOSED WATER MAIN ABOVE EXISTING STORMWATER OR SEWERLINE WITH LESS THAN 18" VERTICAL SEPARATION

PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR LESS FROM EXISTING WATER (OR SEWER).



WATER AND SEWER SEPARATION REQUIREMENTS (VERTICAL SEPARATION)

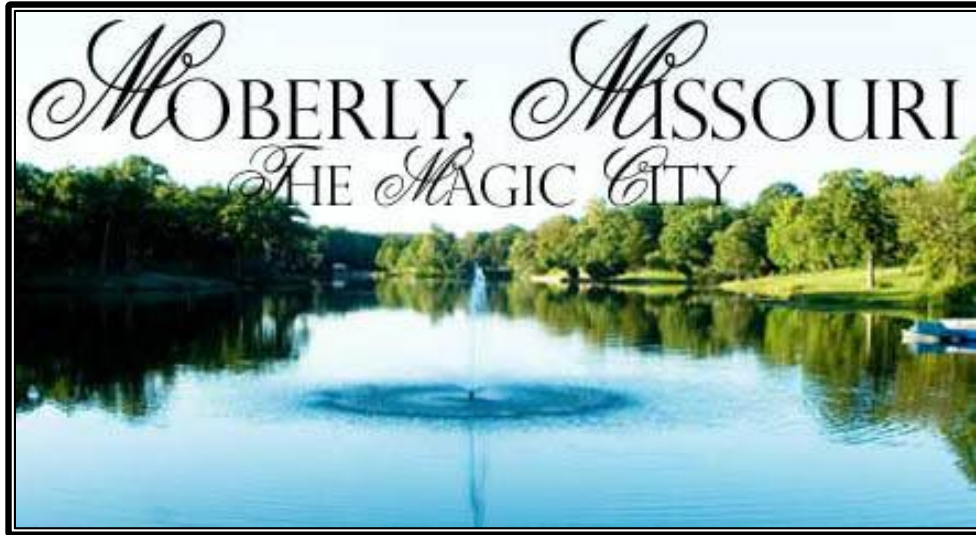


WATER AND SEWER SEPARATION REQUIREMENTS (HORIZONTAL SEPARATION)

STANDARD DETAIL 02009
TYPICAL WATER MAIN SEPARATION REQUIREMENTS
CITY OF MOBERLY - WATER MAIN CONSTRUCTION

10-08-2019

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CITY OF MOBERLY, MISSOURI

**STANDARD SPECIFICATIONS
FOR SANITARY SEWER SYSTEMS**

(ADOPTED _____)



PSBA

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Engineers, Architects, Surveyors, GIS

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**CITY OF MOBERLY, MISSOURI
STANDARD SPECIFICATIONS FOR SANITARY SEWER SYSTEMS**

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SECTION 01000 APPROVAL AND ACCEPTANCE

PART 1 – GENERAL

1.01 SUMMARY

- A. These specifications are for the construction, replacement, extension, and alteration of sewer systems intended to be maintained under authority of the City of Moberly, Missouri.
- B. The intent of these specifications and details is to specify the type and quality of sanitary sewer system materials, installation, inspection, testing, and final acceptance by the City for all improvements, replacements, and extensions to be included as a part of the City's sanitary sewer system.
- C. All design, permitting, materials, and work shall be in accordance with applicable sections of:
 - 1. City of Moberly Standard Specifications for Sanitary Sewer Systems
 - 2. City of Moberly, Missouri – Code of Ordinances, Chapter 42-Utilities
 - 3. Missouri Department of Natural Resources - Minimum Design Standards.
 - 4. Missouri Standard Specification for Highway Construction, current edition
 - 5. Approved, Project-Specific Special Provisions, Specifications, and Plans
- D. The work shall consist of obtaining all required permits, approvals, and legal easements before beginning work. Work includes furnishing all labor, materials, and equipment for the complete installation of sewer line extension and/or alterations, and appurtenances, in conformance with approved construction documents.
- E. Proposed modifications, alterations, or changes to City of Moberly, Missouri Standard Specifications and Details must be submitted to the City for approval prior to implementing changes.

1.02 DEFINITIONS

- A. City: City of Moberly, Missouri.
- B. Wastewater Department: City Wastewater Department.
- C. Enforcement Officer: City Director of Public Utilities or designated representative.
- D. Engineer: Licensed Professional Engineer in responsible charge for the project and licensed to perform services in the State of Missouri.
- E. Developer: Entity requesting sewer service construction, modifications, extensions, and/or alteration to the city sewer system. The Developer could be a public or private entity, such as the City or private Developer.
- F. Contractor: Entity contracted by Developer to perform work on water main and services. The Contractor is responsible for constructing approved plans.

Standard Specifications For
Sanitary Sewer Systems

- G. Owner: Entity who is responsible for long term performance, maintenance, and operation of sanitary sewer systems. The City will typically become the Owner upon final approval and acceptance by City. The Developer will be responsible for the project until final approval and acceptance.
- H. Standard Specifications: City of Moberly, Missouri Standard Specifications for Sanitary Sewer Systems.

1.03 DESIGN - GENERAL

- A. All sewer system extensions or alterations shall be designed, signed, and sealed by an Engineer.
- B. Sanitary Sewer Systems shall be designed to meet City of Moberly, Missouri Specifications and minimum design requirements in accordance with Rules of Missouri Department of Natural Resources, Division 20 – Clean Water Commission, Chapter 8 – Design Guides (MoDNR Design Guides). Gravity Sewer Design shall be in accordance with Title 10 CSR 20-8.120. Sewage pumping station and force main design shall be in accordance with Title 10 CSR 20-8.130.
- C. Design considerations shall include, but are not limited to:
 - 1. Design capacity and flow; flow velocity, flow depth, and solids deposition;
 - 2. Future extensions, service connections and system expansion;
 - 3. Depth of bury; flowline gradient;
 - 4. Topography; subsurface soil, rock, and groundwater conditions; flood plains
 - 5. Construction means and methods; construction and maintenance accessibility;
 - 6. Excavation support systems; Dewatering and water control;
 - 7. Pipe anchorage for steep gradients or installations below groundwater;
 - 8. Excavation depths; external loading; differential ground and pipe movement;
 - 9. Road, highway, and street crossings; pavement repair;
 - 10. Pipe alignment and gradient; location; public and private easements; competing uses;
 - 11. Manhole sizes and locations; flow channel configurations, water tightness; inverted siphons; relationship to waterbodies; aerial crossings; water supply protection;
 - 12. Relative location of utilities, structures; roads, and stream crossings.
- D. Sanitary sewers shall be polyvinyl chloride (PVC), unless otherwise specified in the Standard Specifications. Clay tile sewer mains and taps shall be replaced with SDR26 PVC, or greater.
- E. Service lateral connections shall be at least 6 inches with a minimum gradient of 0.60%.
- F. The minimum diameter pipe for sanitary sewer mains shall be 8-inch. Size shall not decrease with increasing length downstream in direction of flow.
- G. Pavement Structure Crossings: In accordance with authority having jurisdiction with a design vehicle loading no less than AASHTO HS-20.

Standard Specifications For
Sanitary Sewer Systems

H. Sanitary Sewer Alignment:

1. Linear pipe with no gradient or angular changes between structures.
2. Consistent and regular gradient changes at structures.
3. Pipe parallel to existing road/street centerlines.
4. Pipe perpendicular to existing road/street centerlines at crossings.
5. Manholes at all gradient and angular changes.
6. Angular changes in direction of flow less than 90 degrees at manholes.
7. Hydraulic grade line below the inside diameter crown of the pipe.
8. Concrete anchorage cradle or collar if gradient is 20% or greater. Conditional approval is required for gradients exceeding 50 %.

I. Sanitary Sewer Location:

1. To serve all property conveniently.
2. In unimproved or unpaved areas when possible.
3. In public streets, roads, alleys, rights-of-way, or City sewer easements.
4. To avoid crossing private property.
5. To avoid interference between house, foul water, sanitary sewer, and storm sewer connections.
6. At a sufficient distance from existing/proposed structures, foundations, and underground utilities to limit encroachment and potential instabilities during construction.
7. To avoid karst features, water bodies, and storm water overflow; no sanitary lateral cleanouts or sewer vents shall be placed within an overflow path of stormwater.

J. Sanitary Sewer Manholes:

1. Provide access to sewers for inspection, maintenance, and repair. New manholes shall not have steps.
2. Provide junction structures for connecting lines and alignment changes.
3. Distance between manholes shall not exceed 400 feet for pipe sizes less than 15 inches
4. Distance between manholes shall not exceed 500 feet for pipe sizes greater than 15 inches. Conditional approval may be given for increased spacing on a project specific basis
5. Minimum inside diameter for manholes is 48 inches.
6. Manholes with sewer pipe diameters greater than 36 inches are considered special structures and shall be designed by an engineer licensed in Missouri and approved by the City.

Standard Specifications For
Sanitary Sewer Systems

7. Manholes shall be installed on each side of a stream, creek, or water body crossing and installed at least 10 feet laterally behind top of bank.
8. Manholes within FEMA mapped 100-year flood limits, within storm water overflow paths, or other areas subject to flooding shall be water-tight and include a lock-type water-tight manhole cover.

K. Sanitary Sewer Design Flow:

1. Hydraulic calculations shall be included in submittal packages to be reviewed by the City.
2. Sewer flows shall be based on the design peak hourly flow in accordance with MoDNR Design Guides 10 CSR 20-8-110 and shall be designed to prevent sanitary sewer overflows. If actual flow data is available, it may be used in lieu of the design average daily wastewater flow. In no case shall the ratio of peak hourly flow to design average flow be less than 4.
3. Population factors shall be determined from the most recent United States Census Tracts. In lieu of census data, 3.7 persons per household may be used for residential applications.
4. Project-specific flow design for non-residential, unconventional, or other applications may be considered in lieu 10 CSR 20-8-110, Table 1, on a project-specific basis and subject to review and approval by the City and MoDNR.

L. Sanitary Sewer Gradient:

1. The following minimum pipe and flowline gradients shall be used. These values assume a minimum velocity of 2.0 feet per second, flowing full, and are based on a Manning “n”: value of 0.013.

Nominal Pipe Size (inches)	Percent Slope
8	0.40
10	0.28
12	0.22
15	0.15
18	0.12
21	0.10
24	0.08
27	0.067
30	0.058
36	0.046

2. Field verification of as-built pipe gradient is required. Submittal of revised hydraulic calculations for lines with as-built gradients less than the approved design gradient by more than 0.1% is required. Removal and replacement of sewer lines and structures will be required if sufficient hydraulic capacity and cleansing velocity of the system is not met.

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M. Sanitary Sewer Minimum Depth and Cover:

1. 9 feet below finish grade to flowline for new sewers with reasonable expectation of future expansion or extension. The City will review this requirement on a project-specific basis. In some cases, upstream topography may indicate shallower burial is more economical.
2. 3 feet to top of pipe for sewer mains.
3. 2.5 feet to top of pipe for service lateral connections. Service laterals shall be at least 2.5 feet below low-floor or basement-floor elevations. This elevation shall determine recommended depth of new sewer mains.
4. At stream and channel crossings, streambanks shall be protected with a grouted rock blanket in accordance with MoDNR Design Guides 10 CSR 20-8.120 (8) "Sewers in Relation to Streams".
5. Deviations from Best Practices will be reviewed by the City on a project-specific basis.

N. Sanitary Sewer Manhole and Sewer Line Connections:

1. All connections to manholes are subject to City review and approval. Connections to existing structures may require rehabilitation or reconstruction. Rehabilitation or reconstruction shall be included in the scope of a proposed project, where appropriate.
2. Service connections shall be made to sewer lines with a factory tee, Inserta Tee or approved equal. All service connections shall be made to sewer lines. Service connections to manholes will be reviewed by the City on a project-specific basis.
3. Drop type manhole connections shall be provided for a sewer line entering a manhole 24 inches or more above the invert.
 - a. Drop Pipe size shall be 12 inches or less.
 - b. Outside drops shall be fully encased in concrete.
 - c. Inside drops connections are allowed if manhole inside diameter is at least 48 inches and the incoming sewer gradient is less than 1%. Only one inside drop is allowed in a manhole.
 - d. Drop connections shall not be made through manhole joints or the transition conical section.
 - e. Manhole inverts shall be shaped to provide proper flow through the manhole
4. Force main connections to manholes shall be made within 12 inches of the manhole flowline and the invert shall be shaped to allow proper flow through the structure.
5. Pipes entering and exiting manholes at the flowline should project through the center of the structure and the manhole invert shall be shaped to ensure proper flow through the structure.
6. The number of lines entering a manhole, either new or existing, shall be kept to a minimum.

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7. All replaced or repaired sewer mains shall be re-connected with a Shear Guard type fitting, or approved equal, to mitigate effects of differential pipe movement at joint and connections to dissimilar pipe materials.

O. Adjusting Manholes to Grade

1. If a proposed project requires manhole adjustment to grade, the proposed grade and method of adjustment shall be included in the project plans and is subject to City approval.

1.04 DESIGN - SEPARATION REQUIREMENTS

A. Public health is paramount. To protect the public health, the following separation requirements shall be met for water lines near sanitary and storm sewer lines. These requirements apply to both conventional trench-type construction methods and trenchless construction methods including but not limited to directional drilling and utility jacking and boring. These requirements shall be considered minimum requirements. Additional requirements may be required as conditions of required permits.

B. The following factors should be design considerations for separation requirements:

1. Materials and type of joints for water and non-potable fluid pipes.
2. Soil conditions.
3. Service and branch connections into the water main and non-potable fluid.
4. Compensating variations in the horizontal and vertical separations.
5. Space for repair and alterations of water and non-potable fluid pipes.
6. Routing water mains around manholes.

C. Horizontal Separation Requirements

1. See Standard Details.
2. Water lines shall be located at least ten (10) feet horizontally from any existing or proposed line carrying non-potable fluids such as, but not limited to, drains, storm sewers, sanitary sewers, combined sewers, sewer service connections, inlets, manholes, and process waste or product lines. The distance shall be measured edge to edge.
3. Water mains may be located closer than ten (10) feet when:
 - a. Local conditions prevent lateral separation.
 - b. The water main invert is at least 18 inches above the crown of non-potable fluid lines.
 - c. The water main is either in a separate trench or in an adjacent trench on an undisturbed earth shelf located on one side of the non-potable fluid line.
4. If separation requirements listed above cannot be met, the water line shall be placed in casing suitable for potable water in accordance with City Standard Specifications or the non-potable fluid line shall be re-constructed using pipe suitable for potable water use in accordance with Section 01001 – Standard Specification for Water Mains.

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D. Vertical Separation Requirements

1. See Standard Details. The minimum vertical separation from water lines and non-potable fluid lines shall be 18 inches.
 - a. If the 18-inch vertical separation cannot be met for water lines above non-potable fluid lines, the water line shall be placed in casing suitable for potable water in accordance with City Standard Specifications and Details. Casing pipe shall be placed no closer than 4 inches above non-potable fluid pipe.
 - b. For water lines placed 18 inches or more below a non-potable fluid line, the water line shall be placed in casing suitable for potable water in accordance with City Standard Specifications and Details. Adequate support shall be provided to prevent damage to utilities located above the water line.
 - c. Where required, protective casing shall extend a minimum of 10 feet from non-potable fluid line measured perpendicular to the non-potable fluid line. Casing shall be sealed at each end according to City Standard Specifications.

1.05 PRE – CONSTRUCTION SUBMITTALS

- A. **Preliminary Submittal:** Project-specific special provisions, specifications, and plans shall be submitted to the City for review and approval of any public sewer main alteration or extension. The submittal shall be prepared by an Engineer. Submittal shall include but may not be limited to:
1. A completed MoDNR Application for Construction Permit – Sewer Extension, Form MO 780-1632.
 2. Proposed alignment, grade and locations of new structures and connections to existing sewer systems.
 3. Materials list and manufacturer data sheets, catalog data, and illustrations for all proposed materials to be used for the project. Material test certificates and affidavits of compliance with applicable standards.
 4. A work plan describing construction means, methods, sequencing, and scheduling.
 5. Plan showing all existing utilities and identifying potential conflicts with proposed work. If utility relocation is required, the Developer and their Engineer, in conjunction with respective utility owners, shall provide a proposed utility relocation plan for approval. The relocation of existing utilities shall be incorporated into the overall construction project as well as appropriate demolition plan of abandoned utility facilities.
 6. Other submittals detailed in other sections of City Standard Specifications
- B. **Preliminary Submittal Review(s):** Project-specific special provisions, specifications, and plans shall be submitted to the City of Moberly for review and approval of any public sewer main alteration or extension. The submittal shall be prepared by a professional licensed to practice in the State of Missouri. Submittal shall include:
1. At discretion of City, multiple iterations of the preliminary submittal review will be performed until all design and pertinent modifications are complete.

C. Final Submittal:

1. Final submittal to the City shall include Engineer's official seal, current date stamp, and signature on project-specific special provisions, specifications, and plans. Three (3) hard copies and one (1) electronic copy in .pdf format.
2. Submit approved MoDNR Application for Construction Permit – Sewer Extension, Form MO 780-1632. No work may begin until a copy of the approved permit has been provided to City.
3. Submit legally recorded copies of required utility easements, if any. No work may begin within proposed easements without having legally recorded permanent easements.
4. Submit approved Missouri Department of Transportation Highways and Transportation Commission, Permit to Work on Right of Way, if applicable.

1.06 INSPECTION

- A. In general, all work shall be inspected by the Enforcement Officer. Inspection for acceptance of materials will be conducted as soon as practical after materials arrive on the job site. Inspections will be performed as work progresses.
- B. The Enforcement Officer shall always have access for observation and inspection during the work. Access will be coordinated with the Contractor. The Contractor shall furnish all reasonable aid and assistance required by the Enforcement Officer for the proper inspection and examination of work and materials. The Enforcement Officer shall be notified at least two (2) working days in advance of all testing for inspection and observation. Notifications are required in accordance with other Standard Specifications.
- C. The Enforcement Officer reserves the right to reject materials and work not in compliance or accordance with approved plans and specifications.
- D. The Enforcement Officer reserves the right to suspend work.
- E. Under no circumstance shall service connections be made to existing mains without approval. All service connections will be coordinated by Contractor and conducted in the presence of Enforcement Officer.

1.07 POST – CONSTRUCTION FINAL SUBMITTAL

- A. Upon successful completion of construction and obtaining required testing results meeting or exceeding performance requirements, the Developer shall submit:
 1. Copies of all test reports, including failed tests.
 2. Submit two (2) copies of as-built drawings to City showing all changes, deviations, or modifications to original plans. As-built drawings shall include reference swing tie measurements from identifiable landmarks to all service connections. Each service connection shall have at least two (2) reference swing tie measurements.
 3. As-built drawings shall be completed by Engineer, dated and clearly marked with the name and company of the person illustrating the changes.

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1.08 ACCEPTANCE

- A. After Final Submittal and City Approval, the City will conditionally accept the work.
- B. The Owner and Contractor shall warranty all work and materials for a period of one year. The Owner and Contractor will be responsible for repairing and replacing failures or damages resulting from poor workmanship and defective materials.
- C. The Enforcement Officer will inspect the work periodically during the warranty period, document conditions, and notify Developer of repairs required, if any.
- D. Final acceptance will be given when the warranty period ends, and all work and site conditions are to the satisfaction of the City.

END OF SECTION 01000

SECTION 01001 SEWER LINES AND MANHOLES

PART 1 – GENERAL

1.01 SUMMARY

- A. The design and construction of sewer main replacements, extensions, and alterations shall be in conformance with the City of Moberly Standard Specifications and Missouri Department of Natural Resources Minimum Design Standards for Sewer Systems.
- B. The work shall consist of furnishing all labor, materials, and equipment for complete installation of sewer main replacements, extensions, alterations, and appurtenances, in conformance with the lines and grades shown on the plans, as established by the Engineer, or otherwise specified.
- C. The Contractor shall employ skilled, qualified workers and supervision to perform work following generally accepted industry practices. The City reserves the right to suspend work if, in the opinion of the Enforcement Officer, this requirement is not being met.

1.02 DEFINITIONS

- A. City: City of Moberly, Missouri
- B. Sewer Department: City Sewer Department
- C. Enforcement Officer: City Director of Public Utilities or designated representative
- D. Engineer: Licensed Professional Engineer in responsible charge for the project licensed to perform services in the State of Missouri.
- E. Developer: Entity requesting sewer service construction, modifications, extensions, or alterations to the City sewer system. The Developer could be a public or private entity, such as the City of Moberly or a private Developer.
- F. Contractor: Entity contracted by Developer to perform work on sewer main and services. The Contractor is responsible for constructing approved plans.
- G. Owner: Entity who is responsible for long term performance, maintenance, and operation of new sewer mains. The City will typically become the Owner upon final approval and acceptance by City. The Developer will be responsible for the project until final approval and acceptance.

1.03 RELATED WORK

- A. Section 01000 – Approval and Acceptance
- B. Section 01002 - Earthwork
- C. Section 01003 - Directional Drilling
- D. Section 01004 - Utility Jacking and Boring
- E. Section 01005 - Pavement Repair

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1.04 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least five (5) business days prior to commencing work.

1.05 SUBMITTALS

- A. See Section 1000 – Approval and Acceptance
- B. Material product data
- C. Work Plan detailing means, methods, equipment, sequencing, schedule, and testing for.
- D. Testing Reports and documentation of repairs

1.06 JOB CONDITIONS

- A. Interrupting Utility Service:
 - 1. Utility services to the City and existing customers shall not be interrupted unless approved by the Enforcement Officer and existing utility provider.
 - 2. If approval for an interruption of service is obtained, the Contractor shall provide an eight-hour notification to the Enforcement Officer and all affected occupants. The City Fire Department shall be notified at least 24-hours in advance.
 - 3. The Contractor shall provide standby service, if required. Outages shall not exceed 6 hours and will be coordinated with the Enforcement Officer.
 - 4. The Water Department is responsible for operation of in-service water valves, including closure as needed. Closure by other entities will not be permitted.
 - 5. The Contractor shall be responsible for preventing contamination of existing lines.
- B. New sewer mains must be fully tested and approved before installing service line connections.
- C. Whenever pipe laying is not actively in progress, open ends of all installed pipe and fittings shall be sealed water tight.

1.07 MATERIAL DELIVERY, STORAGE, AND HANDLING

- A. Means and methods for material shipping, loading, transporting, unloading, storing, and placing shall prevent damage. Damaged and/or defective materials shall not be installed. The City reserves the right to reject all damaged or defective materials.
- B. All materials shall be packaged, labeled, or otherwise marked with adequate, identifiable information to determine suitability for intended project application.
- C. Materials shall be stored at a mutually agreed upon location. Materials shall not be stored directly on the ground or in direct sunlight. They shall be stored in a manner to ensure they are kept clean, dry, and free of foreign debris.
- D. Materials shall be protected in a manner to prevent entrance of contamination or foreign debris.

1.08 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Gravity Sewer Systems
 - 1. **Sewer main** will be measured and paid by the lineal foot of pipe along pipe centerline, including all labor, equipment, and materials required for installation. Unless otherwise identified as a bid item, unit cost shall include: excavation, backfill, fittings, joints, tracer wire, warning tape, erosion control, dewatering, pavement repair, seeding, and cleanup.
 - 2. **Manholes** will be counted as a single unit and be paid on a per-each basis, including all labor, equipment, and materials required for installation. Costs for pipe insertion, grouting, sealing; invert forming, frames and lids shall be included in the unit costs.
 - 3. **Service Lines and Connections** will be paid for on a per each basis, including all labor, equipment, and materials required for installation. Unit cost will include connections at sewer main, connections to service lines (new and existing), and cleanout installation where specified.
 - 4. **Separation Casing Pipe** will be measured and paid by the lineal foot along casing centerline. Unit cost shall include insulating spacers and end seals. Casing required for trenchless construction methods will be paid for separately.
 - 5. Estimated quantities for bid items could change. If quantities increase, additional materials and associated work will be paid for at contract unit cost. Purchasing additional materials and performing additional work shall not be done without prior written approval from the Enforcement Officer.
 - 6. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
 - 7. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - PRODUCTS

2.01 POLYVINYL CHLORIDE PIPE (PVC) AND FITTINGS

- A. Unless otherwise specified or shown on the plans, the following type of pipe shall be used for gravity sewers:
 - 1. PVC pipe less than 18 inches shall meet requirements of ASTM D3034, with minimum SDR26. PVC pipe 18 inches and greater shall be in accordance with ASTM F679.
 - 2. All pipe shall have a minimum stiffness of 46 psi.
 - 3. Pipe shall be bell and spigot type. Wall thickness in pipe bell shall not be less than pipe barrel.
 - 4. Pipe shall have reference marks on male end indicating proper seating into bell.
- B. Fittings shall be of the same material and strength as sewer pipe. Fittings shall be compatible with pipe manufacturer.

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C. Joints and Gaskets:

1. Finish joints shall be in accordance with ASTM D3212
2. Gaskets shall be in accordance with ASTM F477
3. Wall thickness in pipe bell shall not be less than pipe barrel. Pipe shall have reference marks on male end indicating proper seating into bell.
4. Buried joints shall be push-on type unless restrained or mechanical joints are required, specified, or as shown on the drawings.

D. Adapters and Couplings:

1. All sewer main replaced or repaired shall be re-connected. Connection of dissimilar material or different size materials shall be made with an approved, flexible, pre-formed elastomeric material conforming to ASTM - D3212, mechanical or compression seal type and also be equipped with a Shear Guard type fitting or approved equal. Stainless steel bands shall be used.

2.02 MANHOLES

A. Pre-cast concrete manholes: In accordance with ASTM C478 with provisions for gasketed joints between barrel and conical sections. Special design is required for manholes with incoming pipe diameter greater than 36 inches.

B. Size:

1. Base Section: 6-inch minimum floor thickness with 5-inch minimum thickness for wall and base riser.
2. Riser Sections: 5-inch minimum thickness and 48-inch inside diameter with lengths to provide depth/elevations indicated.
3. Top Section: Concentric cone type; top of cone shall match grade ring size.

C. Drop Type Manhole: Same as above. See standard details.

1. Drop pipe shall be PVC pipe with solvent welded elbow at bottom. Pipe shall be installed below flow line of incoming pipe.
2. Inside Drop: Pipe gradient for inside drops shall be less than 1%. Drop pipe shall be same size as incoming line. Use prefabricated or field-fit drop bowl. Solvent weld 90 degree elbow at bottom to match flowline. Drop pipe shall be attached to the inside face of manhole with at least three "Flared-Leg Bracket" type D021 or approved equal, with 3-inch x 3/8-inch stainless steel bolt. Bracket shall be fastened to concrete with stainless steel anchor, wedge-type or grouted. A 3/4-inch stainless steel band shall be wrapped around the pipe and attached to the bracket. At least two bracket/band assemblies shall be used with a maximum spacing of 3 feet.
3. Outside drops shall be either pre-cast with the manhole or fully encased in concrete. Maximum pipe size for outside drops is 12 inches.

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D. Gaskets:

1. In accordance with ASTM C923, rubber or mastic sealant. Ram-Nek, E-Z Stik, or approved equal.

E. Grade Rings:

1. Pre-cast concrete, Cretex Pro Ring, or approved equal and compatible with 24-inch manhole frames and covers. Maximum thickness for grade rings and frame shall be 18 inches.

F. Concrete Manhole Collar:

1. Where specified and shown on the drawings install concrete manhole collars for manholes installed within existing pavement structures in accordance with standard details.

G. Steps:

1. No steps shall be installed in manholes, unless otherwise specified or shown on the drawings.

H. Pipe Connections:

1. In accordance with ASTM C923, resilient, of size required for each pipe connecting to manhole. Pipe connections shall be A-Loc, Z-Loc, or approved equal.

I. Frames and Covers:

1. In accordance with either ASTM A48 - Standard Specification for Gray Iron Castings or ASTM A536 Standard Specification for Ductile Castings manufactured by Neenah Foundry Company or approved equal with machined bearing surface and self-sealing gasket.
2. Frames shall be secured to the manhole with at least four connections. Connections may be wedge anchor or grout type with at least 1/2-inch x 4-inch bolts.
3. 22-inch minimum inside diameter
4. 7-inch to 9-inch riser with 4-inch minimum flange width
5. 24-inch diameter cover, checkered or knobbed surface finish with "SANITARY SEWER" cast into cover
6. The frame shall be compatible with chimney seal installations.
7. Watertight manhole frames and covers shall be provided where indicated on the plans, manufactured by Neenah Foundry Company or approved equal and installed according to manufacturer recommendations. Covers shall have concealed pickholes.

J. Chimney Seals:

1. Where indicated on the plans, an external or internal chimney seal shall be installed between the manhole frame and masonry chimney in accordance with manufacturer's recommendations and specifications. Seals shall be Cretex or approved equal.

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- K. External Joint Sealing Bands:
1. External joint seals shall be installed on each manhole section joint. Seals shall be CretexWrap or approved equal meeting requirements of ASTM C877, Type II, and installed according to manufacturer's recommendations and specifications.
- L. Protective Coatings:
1. Surfaces shall be clean, dry, and contaminant free. Remove surface protrusions and fill air pockets, lifting lug holes, and other surface imperfections with hydraulic cement grout or other approved filler compatible with coating application. Supply written confirmation of material compatibility with selected coating.
 2. All exterior manhole surfaces shall have a waterproof protective coating either factory or field applied.
 - a. 1 or 2 coat asphalt waterproofing conforming to ASTM D449, Type C, 15-mil thickness unless otherwise specified or shown on the drawings.
 3. Provide protective interior surface coatings where specified or indicated on the plans. Protective coating shall be applied according to manufacturer's recommendations and specifications.
 - a. SewerGard polymer lining, or approved equal
 - b. Tnemec Series 66 Epoxoline barrier coat and Tnemec Series 46H-413 finish coat, or approved equal
 - c. The material shall be an impermeable, high strength, corrosion-resistant, fiber-filled or aggregate-filled epoxy material specifically designed to protect concrete surfaces of municipal wastewater treatment structures and collection systems.
 - d. The material shall prohibit water infiltration and shall have proven resistance to corrosive chemicals, including sulfuric acid as well as other chemicals typically found in sanitary sewers.
 - e. The material shall be suitable for application over damp or dry concrete surfaces without the use of a primer.
 - f. The material shall have a non-sagging consistency to permit application on vertical and overhead surfaces.

2.03 CONCRETE

- A. Cast-in-place according to ACI 318, ACI 350R
- B. Cement: ASTM C150, Type I or II
- C. Fine Aggregate: ASTM C33 Sand
- D. Coarse Aggregate: ASTM C33, Crushed Grave, 1-inch maximum particle size
- E. Water: Potable
- F. Reinforcement: ASTM A185, steel, welded wire fabric, plain

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- G. Reinforcement: ASTM A615, Grade 60, deformed steel
- H. Water Cement Ratio: 0.45 maximum
- I. Unconfined Compression Strength: 4,000 psi minimum
- J. Air Entrainment: 3% to 6%

2.04 GROUT

- A. ASTM C1107 Standard Specification for Packaged Dry, Hydraulic Cement Grout (Non-shrink)
- B. Quikrete commercial grade non-shrink precision grout or approved equal.

2.05 SEPARATION CASING PIPE

- A. This section applies when casing is required around water mains to comply with sanitary and storm sewer separation requirements. Casing materials, including joints, shall be suitable for potable water. Casing size shall be large enough to allow unrestricted installation of product pipe, including casing spacers, pipe fittings, and joints.
- B. Casing materials may be PVC, Steel, or High-Density Polyethylene (HDPE)
 - 1. PVC casing shall be in accordance with this section.
 - 2. Steel casing shall conform to AWWA C200 and AWWA M11, joined by fully welding in accordance with AWWA C206. Casing shall have a minimum wall thickness of 0.25-inch for casing up to 24 inches.
 - 3. HDPE casing shall be in accordance with Section 01003 – Directional Drilling.
- C. Projection type, non-metallic insulating spacers shall be used to support sewer main inside casing. Insulating spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.
- D. Synthetic rubber end seals shall be installed on each end of the casing pipe. End seals shall be Advanced Model Products – Model AC pull-on or approved equal fastened tightly with stainless steel bands.
- E. See Standard Details.

2.06 TRACER WIRE

- A. Tracer wire shall be green HDPE insulated single strand #12 AWG continuous copper clad steel tracer wire. Tracer wire shall be manufactured by Copperhead Industries LLC or approved equal.

2.07 WARNING TAPE

- A. Warning tape shall be "green" non-metallic, 3-inches wide and at least 5 mil thick. Warning tape shall have "Caution Buried Sewer Line" or similar warning printed on the tape. Tape shall be buried at least 2 feet above top of pipe.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Notify utility providers at least 3 business days prior to performing work adjacent to existing utilities. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.
- B. Coordinate Utility interruptions with service provider. For city-owned utilities, a written approval and two day notification is required before interrupting service.
- C. Document existing conditions including distress to existing features within project limits and footprint of construction. Document conditions at adjoining properties.
- D. When connecting to existing sewer lines, verify invert elevation of existing sewer prior to constructing new sewer.
- E. Establish survey control and verify governing dimensions and elevations. Locate existing structures and piping scheduled for abandonment and/or decommissioning.
- F. Prior to laying pipe, prepare trench subgrade and bedding in accordance with Section 01002 – Earthwork.
- G. Trench excavations shall be protected in accordance with applicable Federal, State, and local regulations, Laws, and rules in accordance with OSHA 29 CFR part 1926. Trench and excavation stability shall be the responsibility of the Contractor.
- H. If surface or ground contamination is suspected or encountered, notify the City immediately. The Developer and Contractor, in communication with the City, shall assess conditions and develop a plan for continued work including but not limited to: removal and disposal of contamination, specifying different sewer line materials and/or sewer line realignment.
- I. All pipe, fittings, and joints shall be clean, and free of foreign debris.
- J. Exclude entrance of foreign material if work is suspended or stopped.
 - 1. Close ends of pipe with snug-fitting closures such as end caps.
 - 2. Do not let water fill the trench. Include provisions to prevent flotation if water control measures are inadequate.
 - 3. Remove water, sand, mud, and other undesirable material from trench before removal of end cap.

3.02 WATER CONTROL

- A. Develop and implement an approved stormwater pollution prevention plan including erosion control measures. Prevent surface water and subsurface or ground water from entering excavations.
- B. If required, dewater to lower groundwater elevation a sufficient depth below pipe and structures to allow specified subgrade preparation, pipe laying, backfilling, and testing.

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1. If dewatering is required, the contractor shall submit a project-specific dewatering plan prepared by an Engineer with at least 10 years' experience designing dewatering systems. Develop and implement site specific studies as needed to assist with the design.
- C. Water from surface runoff, downspouts, and subsurface drains shall be managed and controlled by the Contractor through an approved site drainage system. Equipment and materials required to remove water from excavations shall be on-site and available for uses throughout construction.
- D. Water disposal shall be the responsibility of the Contractor and completed in accordance with applicable federal, state, and local regulations.

3.03 INSTALLATION

A. Pipe Laying

1. In accordance with ASTM D2321 – Standard Practice for Underground Installation of thermoplastic pipe sewers and other gravity flow applications.
2. Perform only when weather and trench conditions are suitable. Do not lay in water.
3. Remove trash, debris, vegetation, snow, ice, water or other unsatisfactory materials from excavations.
4. All materials shall be carefully lowered into the trench using means and methods to prevent damage and entrance of foreign debris. Rolling or dropping materials will not be permitted. End hooks will not be permitted.
5. Commence laying at the downstream end of line and install pipe with spigot ends in the direction of flow. Bells shall be in the direction of the laying operations.
6. Open ends of sewer lines shall be adequately sealed to prevent intrusion of foreign debris during all work stoppages.
7. Clean piping and structures; remove all foreign debris. Maintain drag or swab line and pull past each joint as it is completed.
8. Install concrete cradles, encasement, and anchors in accordance with approved plans. Provide temporary support as required to position or anchor the pipe. Concrete shall be worked beneath pipe to eliminate all voids. Place concrete evenly on both sides of pipe.

B. Manhole Installation:

1. In accordance with ASTM C891 – Standard Practice for Installation of Underground Concrete Utility Structures.
2. Install manholes at locations and orientation and of type as shown on the plans and Standard Details.
3. Seal joints between manhole sections, conical sections, grade rings and frames. Provide water tight manhole covers where specified or shown on the plans.
4. Install and seal pipe connections as specified.
5. Place concrete inverts and benches. Inverts shall be shaped to the incoming and outgoing pipes and smoothly shaped from pipe to pipe to the top of invert at springline. Form smooth, curved channels. Slope benches from manhole wall down to channel at 1 in/ft.

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6. Set top of frames and covers at specified elevations. In general, flush with surface in pavement structures and 1 inch above finished surface in all other area, unless otherwise specified.
7. Fill all voids, holes, and defects with hydraulic cement non-shrink grout. If interior protective coatings are specified, ensure compatibility of filler and coating materials.
8. If field applied, apply waterproof protective coating to exterior surfaces. If factory installed, repair damaged coatings.
9. Apply interior protective coating where specified and shown on the plans.
10. Install external joint sealing bands according to manufacturer's recommendations and specifications.
11. Where indicated, install chimney seals as specified and shown on the plans.

C. Service Connections

1. See Standard Details
2. Provide wye or tee type fitting on sewer main at service connections as shown on Standard Details. Inserta Tee type fittings require City approval.
3. No connections shall have bends greater than 45 degrees.
4. Where indicated, install service line cleanouts according to Standard Details.
5. Re-connect services in accordance with these specifications.
6. If existing service lines will be disconnected and abandoned, the service line shall be plugged with a water-tight seal.
7. Document connection locations relative to manhole locations. Document offset location to existing service line and clean out location. Provide documentation to City.

D. Joining

1. Join pipe in accordance with manufacturer's recommendations
 - a. Clean and lubricate all joint and gasketed surfaces.
 - b. Employ means and methods to prevent damage during jointing.
 - c. Inspect joint openings and deflection for compliance with specifications.
2. Install gaskets, seals, sleeves, couplings, and other fittings according to manufacturer recommendations.
3. Pipe expansion and contraction due to changes in temperature shall be monitored during construction. Previously joined pipe shall be inspected to ensure joints have not separated due to expansion and contraction.

E. Cutting Pipe

1. Cut neatly without damage to pipe. Surfaces shall be perpendicular to pipe centerline.

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2. Remove burrs and sharp edges and smooth the pipe end by grinding.
- F. Casing Pipe
1. Where required, install casing to satisfy separation requirements.
 2. When typical trench-type construction techniques are used, subgrade preparation, bedding, initial backfill, and final backfill shall be in accordance with Standard Specification Section 01002 – Earthwork
 3. When trenchless construction techniques are used, installation shall be in accordance with Standard Specifications Section 01003 – Directional Drilling and Section 01004 – Utility Jacking and Boring
- G. Furnish and install plugs where necessary to properly complete required testing.
- H. Tracer Wire
1. Attach continuous tracer wire to top of sewer line or force main, either taped, banded, or strapped at 5 feet to 7 feet intervals. Install according to manufacturer's recommendations.
 2. Tracer wire shall be looped to the surface at all Manholes and service line cleanouts, and locations specified or as shown on the plans.
 3. All sewer service lines shall have a tracer wire from the sewer main tap to the cleanout at Right-Of-Way.
 4. Prior to acceptance, Contractor shall perform conductivity testing for all tracer wire. Full continuity must be established prior to final acceptance.
- I. Warning Tape:
1. Install continuous warning tape at least 2 feet directly above all sewer lines.
- J. Backfilling and Pavement Repair:
1. Backfill and finish surface in accordance with Standard Specification Section 01002 – Earthwork, and Standard Specification Section 01005 – Pavement Structure Repair.
- K. Connections to Existing Manholes:
1. Where specified and shown on the drawings, connect new sewer main to existing manholes. Provide inside or outside drop type in accordance with drawings and specifications.
 2. Cut holes in manhole wall to permit pipe insertion, alignment and gradient establishment and a minimum 2-inch annular space between pipe and wall across full circumference. Remove all debris prior to bedding pipe and placing grout. For smaller pipe (four (4) inch to six (6) inch), the manhole shall be core drilled and a link seal installed. This work is subject to approval of the City of Moberly
 3. Coat surface of hole with grout prior to setting pipe. Place grout bedding prior to inserting pipe. Place pipe in grout bedding and allow to set.

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4. After setting, completely fill annular space with grout and provide smooth surface flush with manhole wall.
5. Construct new inverts between new and existing flowlines in accordance with manhole installation section of this specification.
6. The Enforcement Officer shall observe all connections to existing manholes. If, in the opinion of the City, manhole repair and replacement is required, subsequent mitigation work will be the responsibility of the Contractor.

3.04 QUALITY CONTROL

A. General

1. All work shall be inspected and approved by the Enforcement Officer prior to backfilling. Contractor shall notify the Enforcement Officer and arrange for inspection and observation of all testing prior to commencing.
2. Contractor shall obtain approval from Enforcement Officer prior to making any connections to existing manholes. The Enforcement Officer or representative must be present during any connection activities.
3. The Contractor shall furnish all equipment, labor and other materials and services necessary to perform pressure testing, deflection testing, and pipe gradient verification.
4. All pipe being tested shall have backfill placed in accordance with specifications, except in pavement structure areas. Placement of pavement structure base and surface courses shall be completed after all pressure, leak, deflection, and distortion testing requirements are met. Prior to backfill, verify pipe is to grade and alignment along entire length. Care should be taken during backfill to avoid moving the pipe.
5. Manhole water tightness testing shall be performed prior to backfilling.
6. Submit results of each test to Enforcement Officer.
7. Test failures require repair of failed portions of system until satisfactory test results are achieved.

B. Deflection/Distortion Testing

1. Deflection/Distortion testing shall be performed on all pipe at least 30 days after backfilling.
2. A go/no-go mandrel shall be used. The diameter of the mandrel shall be at least 95% (i.e. 5% Deflection Mandrel) of the pipe base inside diameter determined in accordance with ASTM D3034 or ASTM F679. Base inside diameter is established by subtracting a statistically derived tolerance package from the PVC sewer pipe in accordance with ASTM standard the pipe was manufactured.
3. The device shall be manually pulled through the pipe section being tested. Where possible, begin testing at downstream end of pipe. Mechanical pulling devices are not allowed.
4. Failure to advance the mandrel through the pipe constitutes a failed test.

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C. Low Pressure Air Test for Pipe Sections

1. Perform test in accordance with ASTM F1417 - Installation Acceptance of Plastic Gravity Sewer Lines Using Low Pressure Air. During joining, ASTM F3058 – Standard Practice for Preliminary Field Testing of Thermoplastic Pipe Joints for Gravity Flow (Non-Pressure) Sewer Lines may be used to test individual joints. Final testing for acceptance will be in accordance with ASTM F1417 methods.
2. Seal ends of pipe and openings air and watertight.
3. Minimum test pressure shall be 5 psig above average groundwater pressure, if any, at pipe springline.
4. Pressurize pipe and allow pressure to stabilize at least 4 minutes. Adjust pressure to 5 psig and begin recording time. Measure the amount of elapsed time it takes for the pressure to drop 1 psi. in minutes and seconds.
5. Reference Table 1 in ASTM F1417 Minimum Time for a 1 psig Pressure Drop for Size and Length of Pipe for $Q = 0.0015 \text{ ft}^3/\text{min}/\text{ft}^2$ of Internal Surface. Measured time greater than those listed in the table for a particular pipe size and length constitute a passing test.

D. Manhole Water Tightness

1. Vacuum testing and acceptance shall be in accordance with ASTM C1244 – Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill. These testing requirements do not apply to existing manholes, unless otherwise specified or shown on project drawings.
2. Seal manhole. Apply 10 in/Hg vacuum. This creates a pressure differential of approximately 5 psi from outside to inside when test is conducted under normal atmospheric pressure conditions. Maintain vacuum for at least 5 minutes.
 - a. De-water as necessary to remove additional hydrostatic pressure. Vacuum testing a manhole system subject to hydrostatic pressure may induce a pressure differential in excess of design limits of critical flexible connectors.
3. Begin recording time. Measure the amount of elapsed time it takes for the pressure to drop 1 in/HG in minutes and seconds.
4. Reference Table 1 in ASTM C1244 for minimum elapsed time for a drop in vacuum of 1 in/Hg. Measured time greater than those listed in the table for a particular manhole size and depth constitute a passing test.

END OF SECTION 01001

SECTION 01002 EARTHWORK

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for earthwork, trenching, backfilling and compacting. The work shall consist of all labor, materials, and equipment required to install sewer main and appurtenances in accordance with contract documents, drawings, and specifications.
- B. The Contractor shall employ skilled, qualified workers and supervision to perform work following generally accepted industry practices. The City reserves the right to suspend work if, in the opinion of the Enforcement Officer, this requirement is not being met.

1.02 DEFINITIONS

- A. City: City of Moberly, Missouri
- B. Sewer Department: City Sewer Department
- C. Enforcement Officer: City Director of Public Utilities or designated representative.
- D. Engineer: Licensed Professional Engineer in responsible charge for the project licensed to perform services in the State of Missouri.
- E. Developer: Entity requesting sewer service construction, modifications, extensions, or alterations to the City sewer system. The Developer could be a public or private entity, such as the City of Moberly or a private Developer.
- F. Contractor: Entity contracted by Developer to perform work on sewer main and services. The Contractor is responsible for constructing approved plans.
- G. Owner: Entity who is responsible for long term performance, maintenance, and operation of new sewer mains. The City will typically become the Owner upon final approval and acceptance by City. The Developer will be responsible for the project until final approval and acceptance.
- H. ASTM: American Society for Testing and Materials

1.03 RELATED WORK

- A. Section 01000 – Approval and Acceptance
- B. Section 01005 - Pavement Repair
- C. Section 01006 - Seeding

1.04 REFERENCE STANDARDS

- A. ASTM D698 - Moisture-Density Relations of Soils and Soil Aggregate Mixtures, Using 5.5 lb. Rammer and 12-inch Drop.
- B. ASTM D6938 – Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (shallow depth).

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- C. Missouri Standard Specification for Highway Construction.

1.05 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least five (5) business days prior to commencing work.

1.06 SUBMITTALS

- A. See Section 1000 – Approval and Acceptance.
- B. Work Plan detailing means, methods, equipment, sequencing, and schedule for Earthwork.
- C. Traffic control plan and required permits from jurisdictions having authority.

1.07 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Trenching, backfilling, and compacting shall be included in the Contract unit cost of sewer main pipe.
- C. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - PRODUCTS

- 2.01** Materials shall be in accordance with Contract Documents, plans, specifications, and approved submittals.

2.02 BEDDING AND INITIAL BACKFILL

- A. Granular bedding containing no clods, muck, sod, frozen material, roots or other deleterious material with a plasticity index not greater than 6 and meeting the following gradation requirements.

Sieve Size	Percent Passing
1.5 inch	100
#4	20-60
#200	0-6

2.03 FINAL BACKFILL

- A. **Excavation Spoils:** suitable silt, sand, gravel, lean clay or combinations thereof containing no clods, muck, organics, frozen material, or other deleterious material from excavations. Maximum particle size shall be 3 inches.
 - 1. If sufficient quantity of suitable materials is not available from excavation spoils, the Contractor shall identify and import suitable materials for backfill. Contractor shall dispose of all unsuitable material.

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- B. **Select Granular Backfill**, Section 1010, Missouri Standard Specification for Highway Construction. Material shall meet the following gradation:

Sieve Size	Percent Passing
3 inches	100
#40	20-60
#200	0-6

2.04 AGGREGATE BASE AND SURFACE

- A. **Aggregate Base:** Type 5, Section 1007, Missouri Standard for Highway Construction.
- B. **Aggregate Surface:** Grade A or B, Section 1006, Missouri Standards for Highway Construction.

2.05 CONTROLLED LOW-STRENGTH MATERIAL (FLOWABLE FILL)

- A. Controlled Low-Strength Material: Self-compacting, flowable concrete material produced from the following:
1. Portland Cement: ASTM C150/C150M, Type I or Type II.
 2. Fly Ash: ASTM C618, Class C or F.
 3. Normal-Weight Aggregate: ASTM C33/C33M, 3/4-inch nominal maximum aggregate size.
 4. Water: ASTM C94/C94M.
 5. Air-Entraining Admixture: ASTM C260/C260M.
- B. Produce conventional-weight, controlled low-strength material with 100-psi compressive strength when tested according to ASTM C495/C495M and placed in the field with a slump between 9 and 11 inches tested in accordance with ASTM C143..

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.
- B. Establish line and grade to maintain minimum burial and separation requirements in coordination with Enforcement Officer and Engineer. Notify Enforcement Officer and Engineer if conflicts with existing utilities or structures exist.
- C. Trench excavations shall be protected in accordance with applicable Federal, State, and local regulations, Laws, and rules in accordance with OSHA 29 CFR part 1926. Trench and excavation stability shall be the responsibility of the Contractor.
- D. Implement and maintain traffic control plan

3.02 WATER CONTROL

- A. Develop and implement stormwater pollution prevention plan including erosion control measures. Prevent surface water and subsurface or ground water from entering excavations. Dewater to remove all water a sufficient depth below pipe and structures to allow specified subgrade preparation, pipe laying, and backfilling. The plan shall address water disposal if dewatering is required.

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- B. Water from surface runoff, downspouts, and subsurface drains shall be managed and controlled by the Contractor through an approved site drainage system. Equipment and materials required to remove water from excavations shall be on-site and available for uses throughout construction.
- C. Water disposal shall be the responsibility of the Contractor and completed in accordance with applicable federal, state, and local regulations.

3.03 PREPARATION

- A. Clear and grub areas of excavation.
- B. Backfilling and compaction shall not occur until the following conditions are satisfied:
 - 1. Subgrade proof-compacting, required inspection, testing and acceptance by Enforcement Officer.
 - 2. Soft, rutting, pumping, frozen or otherwise unsuitable soils in base of excavations shall be removed at direction of Enforcement Officer. Notify Enforcement Officer once subgrade elevations are reached. Excavate unsuitable soils within directed limits and replace with suitable materials approved by Enforcement Officer. Suitable materials could include but are not limited to bedding, initial backfill, and final backfill.
 - 3. All trash, debris, vegetation, snow, ice, water or other unsatisfactory materials shall be removed from excavations.

3.04 EXCAVATION

- A. Excavate trenches to approved subgrade elevations. Unless otherwise specified, the minimum trench width shall be at least one (1) foot greater than the outside diameter of the pipe.
- B. If rock is encountered, it shall be excavated at least 12 inches wider than the outside diameter of the pipe and at least 6 inches deeper than planned subgrade elevation. Alternatively, pipe alignment and grade could be adjusted to avoid rock excavation if separation, burial, and joint restraint requirements are satisfied. If additional excavation is required, bedding material shall be used as backfill.
 - 1. For City projects, notify Enforcement Officer and Engineer immediately if rock is encountered within excavation limits, and earthwork progress significantly slows or stops. Excavation in rock shall not progress unless approved by Enforcement Officer. The Enforcement Officer will provide guidance and specifications for rock excavation and backfilling on a case by case basis.
 - 2. For City projects, unless identified as a bid item, additional cost for rock excavation will be paid for as additional work in accordance with Contract Documents regarding changes.
 - 3. For City projects, unless identified as a bid item or otherwise addressed on a project specific basis, if surface or ground contamination is suspected or encountered, notify the City immediately. The Contractor, in communication with the City, shall assess conditions and develop a plan for continued work including but not limited to: removal and disposal of contamination, specifying different sewer line materials, and sewer line realignment. Additional work, will be paid for as additional work in accordance with Contract Documents.
- C. Stockpile materials acceptable for use as backfill and topsoil. Stockpile locations relative to excavations shall be incorporated into Contractor's responsibility for excavation stability. Place,

grade, and shape stockpiles to promote positive drainage with adequate erosion control. Dispose unsuitable materials.

3.05 BACKFILLING

- A. Proof-compact subgrade prior to placing bedding or laying pipe. Proof-compacting shall be performed in the presence of Enforcement Officer; approval is required before placing bedding to receive pipe.
- B. Shape and compact bedding to provide uniform bearing of the pipe. Excavate bell holes to allow for unobstructed assembly of the joint. Make bell hole as small as practical. After the joint has been made, carefully fill bell hole with bedding material and compact.
- C. After pipe laying, joining and aligning, place and compact bedding and initial backfill as shown on the plans. Ensure material is worked under the haunch of the pipe to provide adequate side support. Take precautions to prevent movement of the pipe during placement and compaction of haunching material.
- D. Place and compact initial backfill to provide cover over the pipe. Use methods to prevent pipe damage or displacement.
- E. In unpaved areas, place final backfill using methods to prevent pipe damage or displacement. Place final backfill in 6-inch loose lifts and compact. Leave material neatly mounded over the trench. Maintain trench and fill settled areas as they occur. Finish grade to eliminate uneven areas. Seed areas where required.
- F. In paved areas, place and compact base and surface repairs in accordance with details and project specification Section 01005 - Pavement Repair. Place final backfill using methods to prevent pipe damage or displacement.
- G. Jetting or water-settling backfill is prohibited, unless permitted by Enforcement Officer and Engineer.

3.06 COMPACTION

- A. Compact materials in accordance with ASTM D698 and ASTM 6938 and according to the following table:

Material	Minimum Compaction	Maximum Loose Lift Thickness
Bedding and Initial Backfill	90%	4 inches
Suitable Excavation Spoils	90%	6 inches
Select Granular Backfill	95%	6 inches
Aggregate Base	95%	6 inches
Aggregate Surface	95%	6 inches
Bituminous Surface	98%	3 inches

- B. Moisture condition (wetting or drying) fill as needed to achieve optimum moisture contents and required compaction.
- C. Use compaction equipment capable of achieving required densities and avoid damage to pipe, adjacent utilities, and adjacent structures. Self-propelled, "heavy" roller or pad type vibratory rollers shall not be operated within 2 feet from top of pipe.

3.07 QUALITY CONTROL

- A. Compaction quality control shall be provided by Contractor and will be incidental to Contract Unit costs. Quality control technicians and testing organizations shall be trained and certified to perform required testing in accordance with ASTM standards and specifications.
- B. Quality control density testing frequency shall be in accordance with the following table:

Material	Testing Frequency per lift
Bedding and Initial Backfill	One test every 300 linear feet of trench
Suitable Excavation Spoils	One test every 300 linear feet of trench
Select Granular Backfill	One test at each pavement structure crossing
Aggregate Base	One test at each pavement structure crossing
Aggregate Surface	One test at each pavement structure crossing
Bituminous Surface	One test at each pavement structure crossing

- C. Areas where testing indicates insufficient compaction shall be re-compacted, re-conditioned, re-worked, and/or moisture conditioned until requirements are met and to satisfaction of Owner and Engineer.
- D. Controlled low strength material shall be tested in the field for slump and samples collected for comprehensive strength testing. Slump and comprehensive testing shall be in accordance with ASTM C143 and ASTM C495, respectively. Testing frequency shall be 1 set of tests per 100 cubic yards of material used. Slump shall be between 9 and 11 inches. Minimum compressive strength is 100 psi.

3.08 MAINTENANCE

- A. The Contractor will demobilize equipment and restore the work site to the original condition. All excavations will be backfilled, and surfaces restored according to specifications and project drawings.
- B. Remove all leftover materials, including unsuitable excavation spoils, trash, debris, and other construction waste in accordance with applicable federal and state laws and regulations.
- C. Protect newly graded areas from traffic (except pavement crossings) and erosion. Keep free of trash and debris See Section 01005- Pavement Repair for pavement area maintenance.
- D. Repair and re-establish grades in settled, eroded and rutted areas to specified tolerances during warranty period and to satisfaction of Enforcement Officer.
- E. Where differential movement is measurable or observable along excavated areas during general project warranty period, remove surface (pavement, lawn, or other finish), add appropriate backfill material, compact, and replace surface treatment according to project specifications and plans. Restore appearance, quality, and condition of surface or finish to match adjacent work to satisfaction of Enforcement Officer.

END OF SECTION 01002

SECTION 01003 DIRECTIONAL DRILLING

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for directional drilling installation methods for High Density Polyethylene (HDPE) pipe casing or steel pipe casing beneath traveled ways or at locations shown on the drawings. The Contractor shall provide all labor, materials, and equipment required to install casing in accordance with these specifications.

1.02 SUBMITTALS

- A. Submit work plans, shop drawings, and product data for approval. Submittals shall include:
1. Detailed work plan and sequencing including procedures and schedule;
 2. Proposed line and grade of casing pipe to maintain minimum burial depth, minimum separation requirements from existing utilities, and radius of curvature;
 3. Proposed equipment including but not limited to: drilling rig, rotary torque capacity, thrust/pullback pressures, tensile load limit calculations, drill bits, mud system including pump and motor size, down-hole tools, guidance system with stated accuracy, and safety systems;
 4. Pit locations;
 5. Design, means, methods and materials for pit excavation support;
 6. Pit dimensions showing relative location to traveled ways;
 7. Dewatering methods;
 8. Spoil removal methods;
 9. Drilling fluids including water source;
 10. Methods for monitoring drill fluid volumes and losses;
 11. Product data;
 12. Casing pipe material and size;
 13. Casing pipe segment joining methods and procedures;
 14. Product pipe spacers and casing pipe end seal materials;
 15. Erosion control and stormwater pollution prevention plan;
 16. Adverse conditions plan:
 - a. Plan shall address means and methods of work, especially HDPE fusion welding, in adverse conditions such as freezing temperatures, precipitation, and wind and mitigation measures to eliminate resulting effect on pipe fusion and installation;
 17. Remediation plan:
 - a. Identify means and methods to remove obstructions at the boring face;
 - b. Identify remedial measures for mitigating damage to existing facilities, and impacts to traveled ways, including ground subsidence and heaving;
 - c. Identify remedial measures for excessive drill fluid loss;
 18. Experience:
 - a. Submit a list of at least five (5) successfully completed directional drilling projects using HDPE pipe sizes of at least 18 inches and lengths greater than 150 feet within the last five (5) years. Include project owner contact information references substantiating Contractor's experience; and,
 19. As-Built Drawings showing horizontal and vertical alignment of completed casing installation. This submittal shall also include pullback pressure logs, volume of drilling fluid, and fluid losses, if any.

1.03 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least two (2) business days prior to commencing work. All work shall be performed in the presence of the Enforcement Officer.

1.04 BASIS OF PAYMENT

- A. Directional drilling shall be paid for by the lineal footage of casing installed along casing centerline. The unit price shall include:
 - 1. Excavation, use, and backfilling of all pits;
 - 2. Removal and disposal of spoils and drilling fluid;
 - 3. Traffic control;
 - 4. Verifying location and depth of all utilities within impacted area;
 - 5. Casing pipe installation; and,
 - 6. All labor, equipment, and materials required to complete the work.
- B. The unit cost shall be for casing pipe and shall not include product pipe and installation.
- C. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
- D. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 – PRODUCTS

2.01 HIGH DENSITY POLYETHYLENE PIPE CASING

- A. Materials shall be in accordance with Contract Documents, plans, specifications, and approved submittals.
- B. All HDPE shall be manufactured from PE 4710 resin listed as TR-4 by the Plastic Pipe Institute (PPI). The resin shall meet ASTM D3350 with a minimum 445474C cell classification. The manufacturer shall certify the specified cell classification.
- C. HDPE casing shall conform to ASTM F 714, ANSI and AWWA C906, and have an NSF-61 listing.
- D. All pipe, fittings, and fusion equipment shall be provided by one supplier. Fusion equipment must be in satisfactory working order. All fusion equipment operators shall be qualified to perform heat fusing procedures.

2.02 STEEL PIPE CASING

- A. Materials shall be in accordance with approved submittals.

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- B. Steel casing pipe shall meet or exceed ASTM A-139, Grade B with a minimum wall thickness of 0.25 inches and minimum yield strength of 35,000 psi. Steel casing shall be joined by fully welding around the entire circumference of the pipe. Welding shall conform to AWWA Standard C206.

2.03 CASING END SEALS

- A. Synthetic rubber end seals shall be installed on each end of the casing pipe. End seals shall be Advanced Model Products – Model AC Pull-on or approved equal and fastened tightly with stainless steel bands.

2.04 INSULATING SPACERS

- A. Projection type, non-metallic spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.

2.05 DIRECTIONAL DRILLING EQUIPMENT

- A. Directional drilling equipment shall consist of a hydraulically-powered directional drilling rig of sufficient capacity to perform the bore and pullback the casing pipe, a drilling fluid mixing, delivery and recovery system of sufficient capacity to successfully complete the crossing, a drilling fluid recycling system to remove solids from the drilling fluid, a guidance system to accurately guide boring operations, a vacuum truck of sufficient capacity to handle drilling fluid volume, and qualified personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of this project.
- B. The directional drilling rig shall consist of a hydraulically powered system to rotate, push and pull hollow drill pipe into the ground at a variable angle while recirculating pressurized drilling fluid mixture to a guidable drill head. The rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be electrically grounded during drilling and pull-back operations. There shall be a system to detect electrical current from the drill string and an audible alarm that automatically sounds when an electrical current is detected.
- C. Drilling fluid shall be composed of clean water and appropriate bentonite clay additives in accordance with approved submittals. Water shall be from source approved by Enforcement Officer and be contaminant free. Drilling fluids shall be thoroughly mixed and free of clumps or clods.

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.
- B. Construction means, methods, and materials shall be in accordance with approved submittals.
- C. Entry and exit pit excavations shall be constructed in accordance with approved submittals. Excavations should be protected in accordance with applicable Federal, State, and Local regulations, laws, and rules. Excavation protection shall not be less than the standards and regulations established by OSHA 29 CFR Part 1926. Trench safety and stability shall be the responsibility of the Contractor, including placement of excavation spoils and control of water intrusion.

3.02 HANDLING OF MATERIAL

- A. Handle pipes, conduits, casing, and ancillary items in such a manner as not to damage the material. Pipe rollers or other approved means shall be used during pullback operations to avoid damage to casing pipe and product pipe.
- B. Damage to material shall be repaired to the satisfaction of the Enforcement Officer and, if required, replaced.
- C. The Enforcement Officer maintains the authority to reject materials damaged or otherwise unsuitable for project use.

3.03 DRILLING FLUID

- A. Disposal of drilling fluid and spoils will be the responsibility of the Contractor and shall be done in compliance with all Federal, State, and local regulations.
- B. All drilling fluids and loose cuttings shall be contained in access pits or holding tanks for recycling and disposal. Drilling fluid returns into or on other areas shall be cleaned up and disposed of immediately. The Contractor shall notify the Enforcement Officer immediately if drilling fluid returns occur or are spilled in areas other than approved holding structures.
- C. The Contractor shall provide adequate means and equipment for removing drilling fluid and spoils from access pits to mitigate potential overflows and provide for final disposal. Disposal equipment shall be present during all directional drilling operations.

3.04 DIRECTIONAL DRILLING

- A. Perform directional drilling operations in accordance with approved submittals. The Contractor shall provide all material, equipment, and facilities required to perform directional drilling.
- B. The drill path shall be accurately staked with alignment and entry/exit pits.
- C. Pipe, conduit, and casing installation under traveled ways shall progress on a continuous basis without stoppage, except for adding sections, until the leading edge has reached the receiving pit. Engineering approval is required for variations from this specification.
- D. Stop operations if ground movement is detected and implement the remediation plan in accordance with approved submittals. Immediately report movement to the Enforcement Officer. Repair any damages to traveled ways, including displacement (up or down) resulting from construction operations. Corrective actions shall be approved by the responsible authority. Mitigating repairs and associated costs will be the responsibility of the Contractor.

3.05 PILOT HOLE BORING

- A. The entry angle, pilot hole, and boring process shall maintain a curvature that does not exceed allowable bending radius of casing or product pipe and in accordance with approved submittals.
- B. The pilot hole shall be drilled along the Contractor submitted, and approved line, grade, and radius of curvature. No curves will be accepted with a radius more than approved curvature.
- C. Drilling fluid pressures shall be monitored at all times during operations. Pressures shall be controlled to avoid hydraulic fracturing of subsurface materials and prevent structure and ground surface heaving.

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- D. Drilling fluid and cutting return shall be monitored at all times during operations. The volume of drilling fluids and spoil return anticipated shall be estimated based on subsurface conditions encountered. Excessive drilling fluid loss or excess spoil return shall be reported immediately to the Enforcement Officer. The Enforcement Officer will, in consultation with the Contractor, determine if corrective actions are required.
- E. Contractor shall provide adequate containment, drilling fluid and spoil removal equipment and other means required to contain all fluid and spoils and/or remove it from site. No additional compensation will be allowed for containment or cleanup resulting from spillage, hydraulic fracturing, or other means leading to release of drilling fluids.
- F. Alignment Adjustments and Restarts
 - 1. The Contractor shall follow the approved alignment within specifications. If adjustments or restarts are required, the Contractor shall notify the Enforcement Officer for approval prior to adjusting.

3.06 CASING PIPE INSTALLATION

- A. After the pilot hole is completed and approved, the enlarging phase of installation shall begin. The borehole diameter shall be increased to accommodate the pullback operations for the specified casing pipe size. The type of reamer shall be determined by subsurface soil conditions encountered during pilot hole drilling. The reamer type shall be selected by the Contractor and must be equipped with a swivel.
- B. The maximum hole diameter shall be 1.25 times the casing pipe outside diameter. The Contractor may elect to perform multiple reaming passes. Multiple reaming passes will be completed at Contractor's expense.
- C. Borehole stability shall be the responsibility of the Contractor. Open boreholes shall be stabilized using appropriate means to prevent collapse while still maintaining ability to perform work.
- D. Once pullback operations have commenced, operations must continue without interruption until pipe is completely pulled into borehole. During pullback operations, Contractor will not apply more than the maximum safe pipe pull pressure at any time. If casing pipe becomes stuck, Contractor will cease pulling operations and allow any potential "suction lock" to subside and resume pulling operations. If pipe remains stuck, Contractor will notify Engineer. Engineer and Contractor will review available options and proceed accordingly.
- E. Drilling fluid pressures shall be monitored at all times during operations. Pressures shall be controlled to avoid hydraulic fracturing of subsurface materials and avoid structure and ground surface heaving. Contractor shall provide adequate containment, drilling fluid and spoil removal equipment and other means required to contain all fluid and spoils and/or remove it from site. No additional compensation will be allowed for containment or cleanup resulting from spillage, hydraulic fracturing, or other means leading to release of drilling fluids.
- F. Drilling fluid and cutting return shall be monitored at all times during operations. The volume of drilling fluids and spoil return anticipated shall be estimated based on subsurface conditions encountered. Excessive drilling fluid loss or excess spoil return shall be reported immediately to the Enforcement Officer. The Enforcement Officer will, in consultation with the Contractor, determine if corrective actions are required.
- G. The casing pipe shall be protected and supported during pullback operations using rollers or other approved means to minimize damage.

3.07 OBSTRUCTIONS

- A. The Enforcement Officer must be notified immediately if any obstruction is encountered that stops progress of operations. The Contactor shall review the situation with the Enforcement Officer and determine the feasibility of continuing drilling operations, switching to alternative methods, and/or modifying alignment/location of the jack and bore.
- B. If continuing is deemed unfeasible or impractical, the obstructed pilot hole or casing shall be abandoned in place and filled completely with grout or other approved materials.
- C. For City projects, substantiated cost of abandoned work resulting from unforeseen obstructions encountered will be paid for as additional work in accordance with Contract documents.

3.08 ALIGNMENT

- A. The Contractor shall provide an accurate means to monitor horizontal and vertical positions of the casing during construction operations. The Enforcement Officer shall always have access to this information during the directional drilling process. If a magnetic guidance system is used, the Contractor shall identify any surface geo-magnetic anomalies and take appropriate corrective measures to ensure accurate spatial tracking of the drill stem.
- B. The casing shall be installed within a tolerance of 6 inches from approved, line and grade over 100 feet. The tolerance will be adjusted proportionally for shorter or longer casing lengths; however, the maximum deviation for casing lengths longer than 150 feet shall be no more than 1 foot.
- C. The alignment of casing shall be established to allow unrestricted insertion of the product pipe, including spacers, pipe bells, and restrained joints. If product pipe cannot be installed, the casing shall be abandoned and filled with grout or other approved materials. The Contractor shall establish another casing at a location approved by Enforcement Officer.

3.09 PRODUCT PIPE INSTALLATION

- A. The product pipe shall be the size and type as specified or shown on the plans.
- B. The end of product pipe shall be protected from damage during installation into the casing.
- C. Product pipe shall have restrained joints within the casing.
- D. The product pipe shall be supported in the casing pipe using projection-type non-metallic casing spacers.
 - 1. The minimum number of spacer projections around the product pipe circumference shall equal the pipe diameter (i.e. a nominal 10-inch pipe shall have minimum of 10 projections). Refer to manufacturer's product data for spacer type and size.
 - 2. Casing spacers shall fasten tightly onto the product pipe to prevent movement during installation.
 - 3. The insulator spacing shall be installed to support the weight of the product pipe and contents. Spacers shall be placed a maximum of 2 feet from each side of a joint and evenly spaced along the product pipe at intervals not to exceed manufacturer's recommendations or 6 feet, whichever is less.
 - 4. Double spacers shall be installed one foot from each end of the casing.
 - 5. Projection type spacers shall be RACI, Advance Products & Systems, or approved equal.

3.10 SITE RESTORATION

- A. The Contractor will demobilize equipment and restore the work site to the original condition. All excavations will be backfilled according to specifications and project drawings. Surface restoration shall be completed in accordance with Section 01005 – Pavement Repair and Section 01006 - Seeding.
- B. Remove all excess spoils and dispose of in accordance with all federal, state, and local regulations.

END OF SECTION 01003

SECTION 01004 UTILITY JACKING AND BORING

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for jack and bore installation of steel casing. The Contractor shall provide all labor, materials, and equipment required to install casing in accordance with these specifications. This work shall consist of pushing/jacking a steel casing pipe with a boring auger rotating within the pipe to remove spoils as casing is advanced.

1.02 SUBMITTALS

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Submit work plans, shop drawings, and product data for Engineer approval. Submittals shall include:
1. Work plan and sequencing;
 2. Proposed line and grade of casing pipe to maintain minimum burial depth and separation requirements from existing utilities;
 3. Equipment and site configuration;
 4. Jacking and receiving pit locations;
 5. Design, means, methods and materials for pit excavation support;
 6. Pit dimensions showing relative location to traveled ways;
 7. Dewatering methods;
 8. Differential movement monitoring methods;
 9. Excavation face loss prevention methods;
 10. Spoil removal methods;
 11. Drilling fluids;
 12. Product data;
 13. Casing pipe material and size;
 14. Casing pipe segment joining methods and procedures;
 15. Product pipe spacers and casing pipe end seal materials;
 16. Erosion control and stormwater pollution prevention plan;
 17. Remediation plan:
 - a. Identify means and methods to remove obstructions at the boring face;
 - b. Identify remedial measures for mitigating damage to existing facilities, and impacts to traveled ways, including ground subsidence and heaving;
 18. Experience:
 - a. Submit a list of at least five (5) successfully completed jack and bore projects greater than 50 feet within the last five (5) years including project owner contact information references substantiating jack and bore installer's experience; and,
 19. As-Built Drawings showing horizontal and vertical alignment of completed jack and bore.

1.03 NOTIFICATION

- A. The Contractor shall notify the Enforcement Officer at least two (2) business days prior to commencing work. All work shall be performed in the presence of the Enforcement Officer.

Standard Specifications for
Sanitary Sewer System

1.04 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Jack and Bore shall be paid for by the lineal footage of casing measured along casing centerline. The unit price shall include:
 - 1. Excavation, use, and backfilling of all pits;
 - 2. Removal and disposal of spoils and drilling fluid;
 - 3. Traffic control;
 - 4. Verifying location and depth of all utilities within impacted area;
 - 5. Casing pipe installation; and,
 - 6. All labor, equipment, and materials required to complete the work.
- C. The unit cost shall not include sewer pipe and installation.
- D. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
- E. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials shall be in accordance with Contract Documents, plans, specifications, and approved submittals.
- B. Steel casing pipe shall meet or exceed ASTM A-139, Grade B with a minimum wall thickness of 0.25 inches and minimum yield strength of 35,000 psi. Steel casing shall be joined by fully welding around the entire circumference of the pipe. Welding shall conform to AWS requirements for the specific applications.
- C. Synthetic rubber end seals shall be installed on each end of the casing pipe. End seals shall be Advanced Model Products – Model AC Pull-on or approved equal fastened tightly with stainless steel bands.
- D. Projection type spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify the actual locations (horizontal and vertical) of all utilities prior to beginning work. Protect all utilities from damage during construction. Damage to existing utilities shall be repaired to the satisfaction of the utility provider at Contractor's expense.
- B. Construction means, methods, and materials shall be in accordance with approved submittals.

Standard Specifications for
Sanitary Sewer System

- C. Excavations shall be constructed in accordance with approved submittals. Excavations should be protected in accordance with applicable Federal, State, and local regulations. Excavations must meet or exceed regulations established by OSHA 29 CFR Part 1926. Trench safety and stability shall be the responsibility of the Contractor.
- D. Disposal of excess spoils removed from the casing pipe shall be the responsibility of the Contractor and shall be done in compliance with all Federal, State, and local regulations.

3.02 HANDLING OF MATERIAL

- A. Handle pipes, conduits, casing, and ancillary items in such a manner as not to damage the material.
- B. Damage to material shall be repaired to the satisfaction of the Engineer or replaced at Contractor's expense.
- C. The Enforcement Officer maintains the authority to reject materials damaged or otherwise unsuitable for project use.

3.03 JACK AND BORE

- A. Perform jack and bore operations in accordance with approved submittals and the following requirements:
 - 1. Unsupported excavation (open-hole) ahead of the casing will not be permitted. Mechanical arrangements or other devices shall be provided at the leading end of the carrier to prevent drilling ahead of the casing.
 - 2. The use of water or slurry under pressure (jetting) or puddling shall not be permitted to facilitate boring, pushing, or jacking operations. Non-pressurized water or slurry is acceptable for use as a lubricant behind the cutter head.
 - 3. Pipe, conduit, and casing installation shall progress on a continuous basis without stoppage, except for adding sections, until the leading edge has reached the receiving pit. Engineering approval is required for variations from this specification.
- B. Employ methods to prevent loss of the excavation face in accordance with approved submittals.
- C. Stop operations if ground displacement is detected and implement the remediation plan in accordance with approved submittals. Repair any damages to traveled ways, including displacement (up or down) resulting from construction operations. Corrective actions shall be approved by the Engineer. Mitigating repairs and associated costs will be the responsibility of the Contractor.

3.04 OBSTRUCTIONS

- A. The Enforcement Officer must be notified immediately if any obstruction is encountered that stops progress of operations. The Contractor shall review the situation with the Enforcement Officer and determine the feasibility of continuing operations, switching to alternative methods, and/or modifying alignment/location of the jack and bore.
- B. If continuing is deemed unfeasible or impractical, the obstructed pilot hole or casing shall be abandoned in place and filled completely with grout or other approved materials.
- C. For City projects, substantiated cost of abandoned work resulting from unforeseen obstructions encountered will be paid for as additional work in accordance with Contract documents

3.05 ALIGNMENT

- A. The Contractor shall provide an accurate means to monitor horizontal and vertical positions of the casing during construction operations. The Enforcement Officer shall always have access to this information during the jack and bore process. If a magnetic guidance system is used, the Contractor shall identify any surface geo-magnetic anomalies and take appropriate corrective measures to ensure accurate spatial tracking of casing.
- B. Extreme care shall be exercised by the Contractor to maintain line and grade during jacking operations and casing installation. Modifications to means and methods may be required to maintain correct gradient and alignment or correct deviations when deemed necessary by the Enforcement Officer.
- C. The casing shall be installed within a tolerance that allows unrestricted sewer pipe installation at design gradient and alignment.
- D. The alignment of casing shall be established to allow unrestricted insertion of the sewer pipe, including spacers, pipe bells, and restrained joints.

3.06 SEWER PIPE INSTALLATION

- A. The sewer pipe shall be the size and type as specified or shown on the plans.
- B. The end of sewer pipe shall be protected from damage during installation into the casing.
- C. Sewer pipe shall have restrained joints within the casing.
- D. The carrier pipe shall be supported in the casing pipe using projection-type non-metallic casing spacers.
 - 1. The minimum number of spacer projections around the sewer pipe circumference shall equal the pipe diameter (i.e. a nominal 10-inch pipe shall have minimum of 10 projections). Refer to the manufacturer's product data for spacer type and size.
 - 2. Casing spacers shall fasten tightly onto the sewer pipe to prevent movement during installation.
 - 3. The insulator spacing shall be installed to support the weight of the sewer pipe and contents. Spacers shall be placed a maximum of 2 feet from each side of a joint and evenly spaced along the sewer pipe at intervals not to exceed manufacturer's recommendations or 6 feet, whichever is less.
 - 4. Double spacers shall be installed one foot from each end of the casing.
 - 5. Projection type spacers shall be RACI, Advance Products & Systems, or approved equal. Refer to manufacturer's product data for spacer type and size.
- E. Adjust pipe grade as needed by changing the thickness of spacers to compensate for gradient or alignment variations of the casing.

3.07 SITE RESTORATION

- A. The Contractor will demobilize equipment and restore the work site to the original condition. All excavations will be backfilled according to specifications and project drawings.

Standard Specifications for
Sanitary Sewer System

- B. Surface restoration shall be completed in accordance with contract requirements, Section 01005 – Pavement Repair, and Section 01006 – Seeding.
- C. All excess spoils and materials shall be removed and disposed of in accordance with applicable federal, state, and local regulations.

END OF SECTION 01004

SECTION 01005 PAVEMENT STRUCTURE REPAIR

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes specifications for repairing and restoring aggregate, concrete, and asphalt concrete pavement structures in areas where trenches cross these features. The Contractor shall provide all labor, materials, and equipment required to perform work in accordance with these specifications.

1.02 RELATED WORK

- A. Section 01002 – Earthwork
- B. Section 01003 – Directional Drilling
- C. Section 01004 – Utility Jacking and Boring

1.03 REFERENCE STANDARDS

- A. ASTM D698 - Moisture-Density Relations of Soils and Soil Aggregate Mixture, using 5.5 lb Rammer and 12 in Drop.
- B. Missouri State Highway and Transportation Commission: Missouri Standard Specifications for Highway Construction, current edition, including Section 613 Pavement Repair

1.04 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Pavement Structure Repair shall be paid for by the lineal foot at Contract unit cost for surfaces listed on bid form and plan quantities table. Culvert, mailbox, or other surface features required to be removed as a result of construction shall be included in Contract unit cost.
- C. Cost associated with all work and materials not specifically identified as a bid item shall be considered as incidental to other pay items.
- D. Additional, extra, and/or changes in work must be approved by Enforcement Officer. Payment will be on basis of Contract documents regarding changes in work.

PART 2 - MATERIALS

2.01 AGGREGATE BASE AND SURFACE COURSE MATERIALS

- A. Aggregate Base: Type 5, Section 1007, Missouri Standard Specifications for Highway Construction.
- B. Aggregate Surface: Grade A or B, Section 1006, Missouri Standard Specifications for Highway Construction.

2.02 BITUMINOUS SURFACE COURSE AND PATCHING MATERIALS

- A. Prime Coat: Liquid Asphalt RC-MC Grade 30, Section 1015, Missouri Standard Specifications for Highway Construction.
- B. Base Mix: MoDOT Base, Section 401, Missouri Standard Specifications for Highway Construction.
- C. Tack Coat: SS-1 or SS-1H, Section 1015 Missouri Standard Specifications for Highway Construction.
- D. Surface Mix: Type BP-1, Section 401, Missouri Standard Specifications for Highway Construction.

2.03 PORTLAND CEMENT CONCRETE

- A. Portland Cement: Type I or Type II
- B. Concrete Mix: Portland Cement Concrete Base and Pavement, class B-1, non-air entrained with material conforming to Section 502 and 1000, Missouri Standard Specifications for Highway Construction with a slump between 3 and 6 inches.
- C. Water: potable
- D. Reinforcement: #4 rebar placed 12 inches on center each way. Concrete shall be dowelled into existing with drilled and epoxy set #4 rebar dowels placed 18 inches on center, 24 inches long.

PART 3 - EXECUTION

3.01 REPAIR

- A. All trenches in traveled ways shall be repaired with either Bituminous Surface Course and Patching Materials or Concrete Material according to standard details.
- B. All trenches in concrete sidewalk, driveways and roadways shall be repaired/replaced with concrete material according to standard details.
- C. All trenches in aggregate surfaced pavement structures shall be replaced with Aggregate Base and Surface Course according to standard details.
- D. Pavement replaced shall adhere to the following procedures:
 - 1. Place granular backfill to provide temporary surface over trenches across traveled ways. Open to traffic for at least one week. Repair all potholes and level surface daily, adding additional material as needed. Base under the pavement shall be 8 inches thick.
 - 2. After pavement has been open to traffic for one week, saw cut and remove existing pavement on both sides of trench, remove sufficient base course material, level, compact, and construct pavement patch per the project details.

3.02 COMPACTION

- A. In accordance with Section 01002 Earthwork.

Standard Specifications for
Sanitary Sewer Systems

3.03 MAINTENANCE

- A. Maintain surface repairs until final acceptance. Replace and repair areas where excessive displacement, rutting, raveling, or other unacceptable damages occur as a result of construction.
- B. Repaired areas will be accepted at end of maintenance period and all pavement repairs are performing well without further damages.

END SECTION 01005

SECTION 01006 SEEDING

PART 1 – GENERAL

1.01 RELATED WORK

- A. Section 01002 - Earthwork
- B. Section 01003 – Directional Drilling
- C. Section 01004 – Utility Jacking and Boring

1.02 REFERENCE STANDARDS

- A. Missouri Standard Specification for Highway Construction, current edition.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Deliver grass seed in original containers showing analysis of seed mixture, percentage of pure seed, year of production, net weight, date of packaging, and location of packaging. Damaged packages are not acceptable.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.04 BASIS OF PAYMENT

- A. This section applies to projects where the City of Moberly is the responsible Developer/Owner.
- B. Seeding cost shall be included in Contract unit cost for sewer pipe.

PART 2 - MATERIALS

2.01 SEED

- A. Seed shall meet the following minimum percentages for purity and germination, and maximum percentage for weed seed. Vendor certification for each lot number of numbers with testing statement. Seed that has not been tested and certified within the last 1 year will be rejected

Type	Purity	Germination	Weed
Kentucky Blue Grass	85	80	<1.0
Perennial Rye	98	85	<1.0
Red Fescue	97	85	<1.0

2.02 FERTILIZER

- A. Standard commercial fertilizer supplied separately or in mixtures and furnished in water tight containers. Each container shall be marked with weight and manufacturer's guaranteed analysis showing ingredient percentages.
- B. Furnish a mixture of chemical ingredients providing total nitrogen, phosphoric acid, and potassium required based on soil analysis or as otherwise specified. Chemical ingredient tolerances shall be within 2 percent.

2.03 MULCH

- A. Fresh wheat, rye, or oat straw, air dried. Non-toxic to vegetation and to the germination of seed, free from noxious seeds and weed seeds.

2.04 APPLICATION RATES

- A. **Fertilizer:** provide total nitrogen, phosphoric acid, and potassium required based on soil analysis or as otherwise specified.

- B. **Seed**

- 1. Kentucky Blue Grass: 1.10 lbs/1,000 sq. ft.
- 2. Perennial Rye: 0.60 lbs/1,000 sq. ft.
- 3. Redtop: Red Fescue: 0.40 lbs/1,000 sq. ft.

PART 3 - EXECUTION

3.02 PREPARATION

- A. When soil is in a tillable condition, cultivate to a depth of 4 inches, reducing soil particles to a size not larger than 2 inches. Moisture condition surface to receive seed.
- B. Assure seed bed is level, smooth, and free of weeds, clods, stones, roots, and sticks. Moisture condition as needed.
- C. Apply fertilizer and mix into the top 2 inches of soil. Apply within 48 hours prior to seeding.

3.03 SEEDING AND MULCHING

- A. Uniformly sow seeds in two operations at right angles to each other. Within 12 hours after seeding roll areas at right angles to runoff with a lawn type roller. Do not over compact.
- B. Within 24 hours of seeding apply mulch at 2 1/2 tons per acre. Stabilize vegetative mulch by embedding in soil to prevent mulch loss by wind or water erosion.

3.04 MAINTENANCE

- A. Maintain surfaces until final acceptance and supply additional topsoil, seed, and fertilizer where necessary, including areas affected by erosion.
- B. Replant damaged grass areas showing root growth failure, deterioration, bare or thin spots, and eroded areas.
- C. Seeded areas will be accepted at end of maintenance period when seeded areas are properly established and otherwise acceptable.

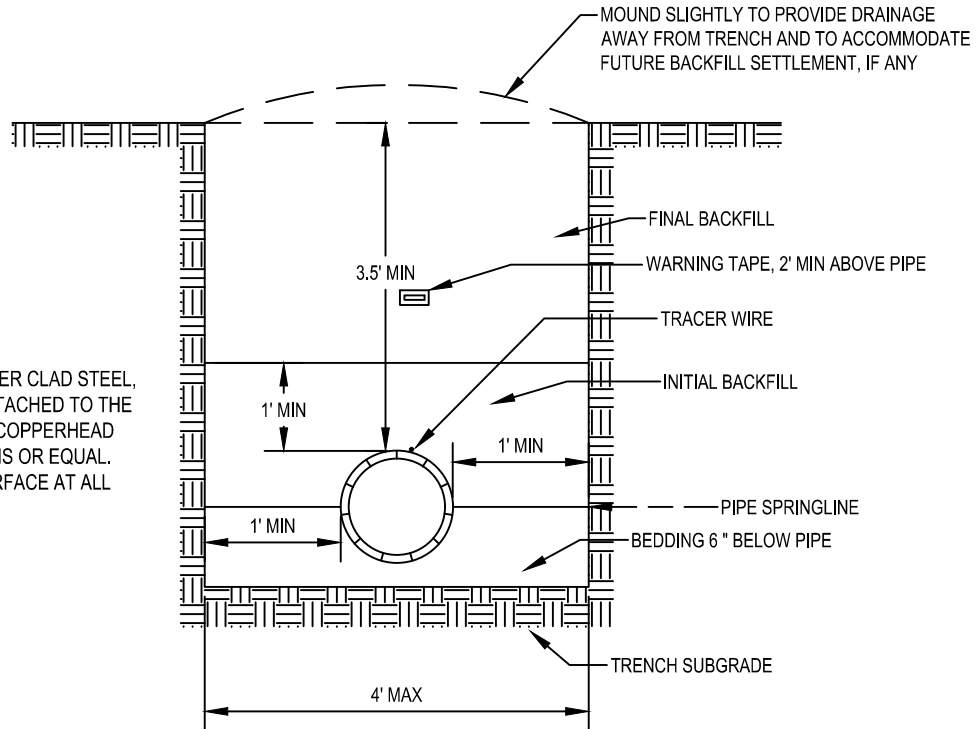
END OF SECTION 01006

**CITY OF MOBERLY, MISSOURI
STANDARD SPECIFICATIONS FOR SANITARY SEWER SYSTEMS**

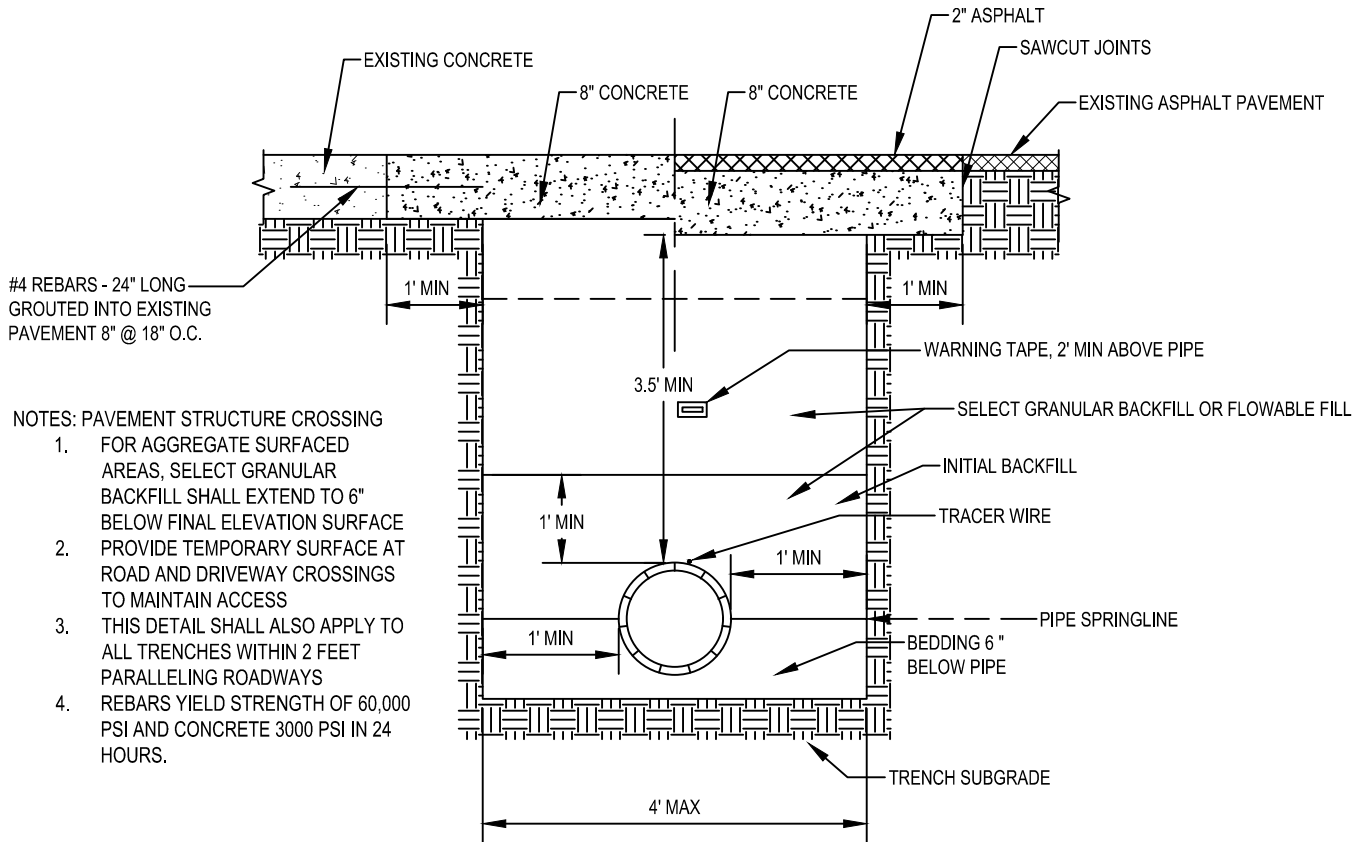
SECTION 2 – STANDARD DETAILS FOR SANITARY SEWER SYSTEMS

02001	Typical Sewer Trench Installations
02002	Typical Sanitary Sewer Manhole
02003	Typical Service Connection and Cleanout
02004	Typical Sewer Main in Casing
02005	Typical Water/Sewer Main Separation Requirements

TRACER WIRE SHALL BE COPPER CLAD STEEL, CCS, (12 GAUGE AWG) AND ATTACHED TO THE SEWER MAIN. WIRE SHALL BE COPPERHEAD INDUSTRIES LLC PART # 1230 HS OR EQUAL. WIRE SHALL LOOP TO THE SURFACE AT ALL MANHOLES AND CLEANOUTS.



TYPICAL TRENCH INSTALLATION DETAIL - UN-PAVED AREAS



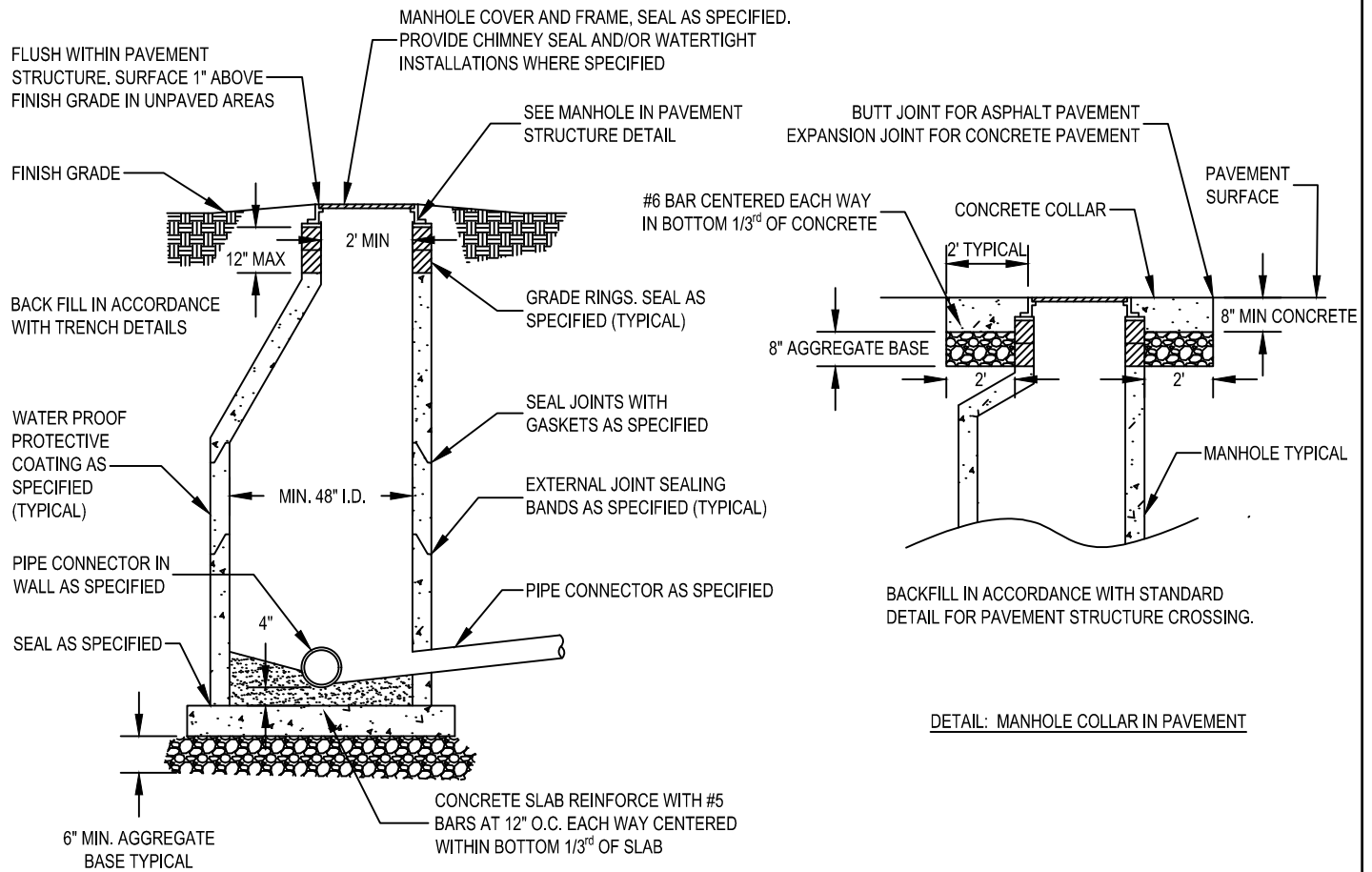
- NOTES: PAVEMENT STRUCTURE CROSSING
1. FOR AGGREGATE SURFACED AREAS, SELECT GRANULAR BACKFILL SHALL EXTEND TO 6" BELOW FINAL ELEVATION SURFACE
 2. PROVIDE TEMPORARY SURFACE AT ROAD AND DRIVEWAY CROSSINGS TO MAINTAIN ACCESS
 3. THIS DETAIL SHALL ALSO APPLY TO ALL TRENCHES WITHIN 2 FEET PARALLELING ROADWAYS
 4. REBARS YIELD STRENGTH OF 60,000 PSI AND CONCRETE 3000 PSI IN 24 HOURS.

TYPICAL TRENCH INSTALLATION DETAIL - PAVEMENT STRUCTURE CROSSINGS

STANDARD DETAIL 02001
 TYPICAL SEWER MAIN IN TRENCH INSTALLATIONS
 CITY OF MOBERLY - SANITARY SEWER SYSTEMS

10-09-2019

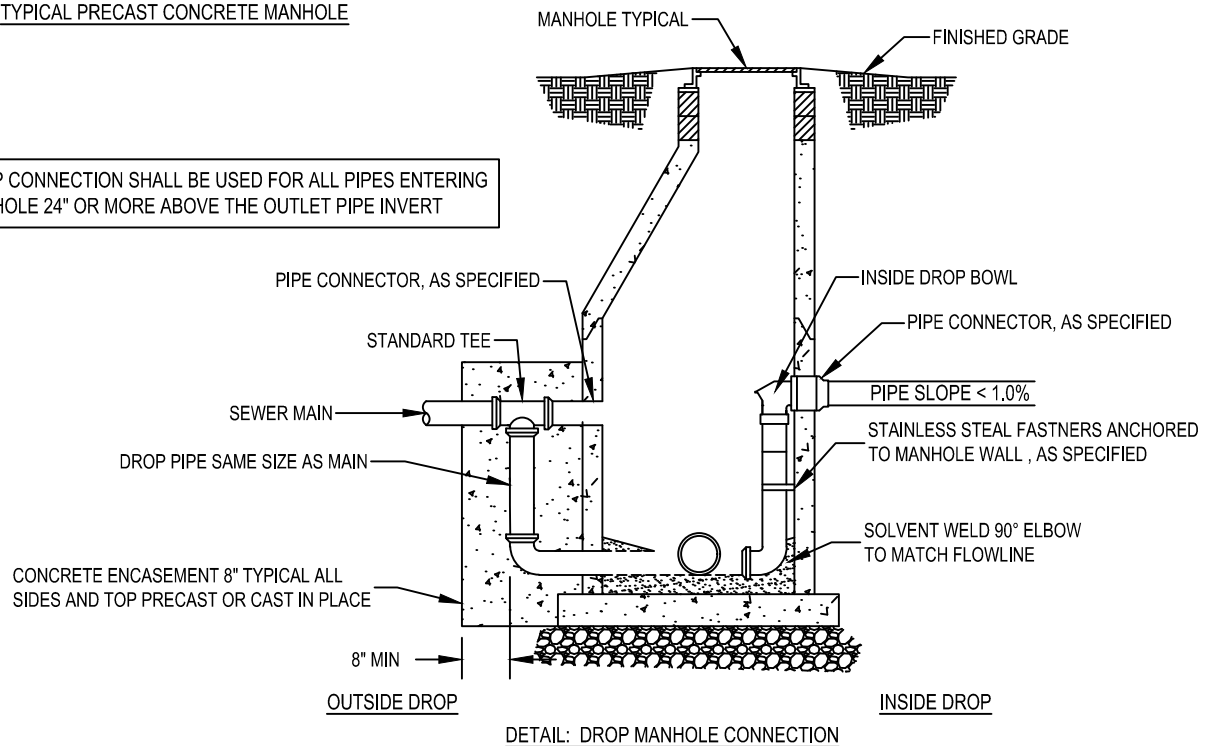
PSBA POEPPING, STONE, BACH & ASSOCIATES, INC.
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 www.psba.com email: psba@psba.com



DETAIL: MANHOLE COLLAR IN PAVEMENT

TYPICAL PRECAST CONCRETE MANHOLE

DROP CONNECTION SHALL BE USED FOR ALL PIPES ENTERING MANHOLE 24" OR MORE ABOVE THE OUTLET PIPE INVERT



DETAIL: DROP MANHOLE CONNECTION

STANDARD DETAIL 02002
TYPICAL SANITARY SEWER MANHOLE
CITY OF MOBERLY - SANITARY SEWER SYSTEMS

10-09-2019

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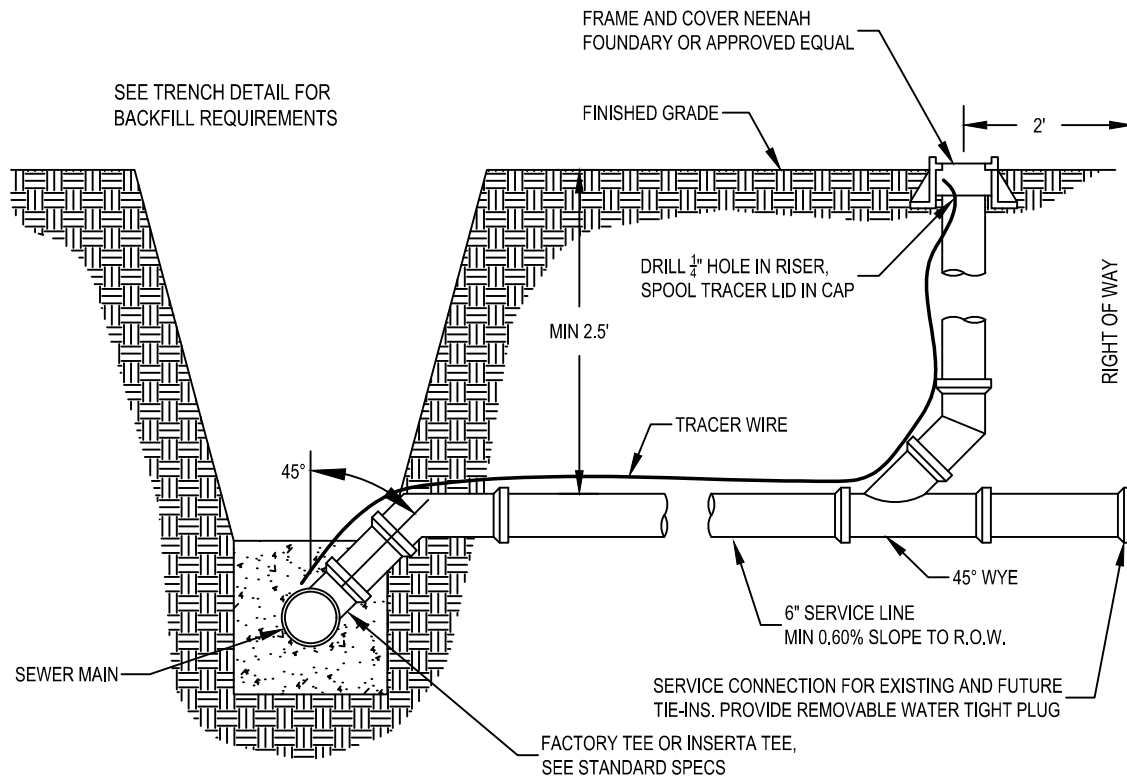
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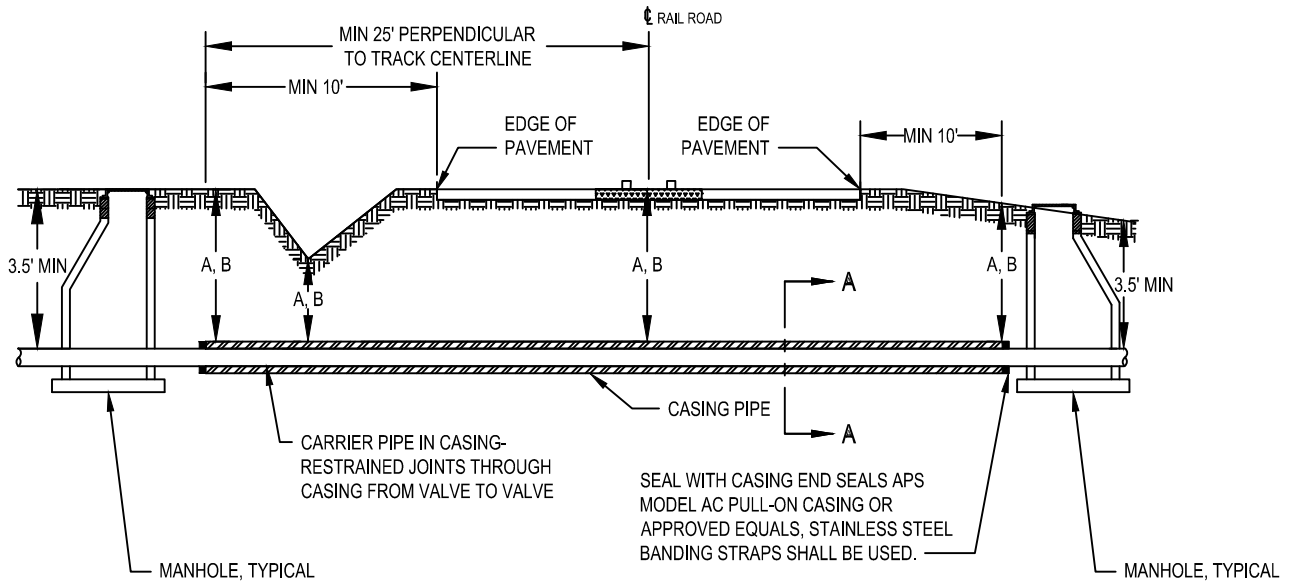
NOTES:

1. CONTRACTOR TO RECORD SERVICE LOCATION RELATIVE TO MANHOLES FOR ALL SERVICE CONNECTIONS AND PROVIDE TO THE CITY PRIOR TO PROJECT COMPLETION.
2. MINIMUM SERVICE LINE SHALL BE 6", UNLESS OTHERWISE APPROVED.
3. SERVICE WYE TO BE INSTALLED, SUBJECT TO ALL TEST REQUIREMENTS.
4. SERVICE WYE AND SERVICE LINE TO BE THE SAME MATERIAL AS SEWER MAIN, UNLESS OTHERWISE APPROVED.
5. PROVIDE TRACER WIRE AND WARNING TAPE FROM WYE TO CLEANOUT.
6. MARK TIE-IN LOCATION AT GROUND SURFACE WITH SURVEY LATHE OR STEEL POST.

STANDARD DETAIL 02003
 TYPICAL SERVICE CONNECTION AND CLEANOUT
 CITY OF MOBERLY - SANITARY SEWER SYSTEMS

10-09-2019

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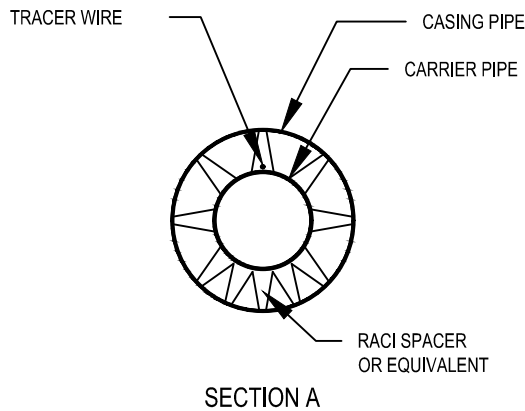


NOTES:

1. CONTRACTOR MEANS AND METHODS FOR TRENCHLESS CONSTRUCTION METHOD MUST BE APPROVED.
2. IF DIRECTIONAL DRILLING METHOD IS USED, THE MINIMUM EMBEDMENT DEPTH TO TOP OF FINISHED CASING SHALL BE 8 FEET.
3. SEE STANDARD SPECIFICATIONS FOR ALLOWABLE CASING PIPE MATERIALS.
4. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND APPROVALS FROM APPROPRIATE REGULATORY AUTHORITY. ALL WORK SHALL MEET ALL REQUIREMENTS OF RESPONSIBLE REGULATORY AUTHORITY
5. CASING SPACERS SHALL BE RACI OR APPROVED EQUAL WITH STAINLESS STEEL BOLTS AND NUTS. CASING SPACERS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED MANUFACTURER'S SPECIFICATIONS OR 6' WHICHEVER IS LESS. DOUBLE SPACERS SHALL BE INSTALLED 1' FROM EACH END OF THE CASING. ONE CASING SPACER MUST BE WITHIN 2' OF EACH SIDE OF A PIPE JOINT. SPACERS SHALL HAVE A MINIMUM HEIGHT THAT EXCEEDS THE PIPE BELL HEIGHT AND RESTRAINED JOINT HEIGHT.
6. ALL JOINTS BETWEEN GATE VALVES SHALL BE RESTRAINED JOINTS.

NOTES:

- A. MINIMUM COVER OVER CASING FOR ROADWAY CROSSINGS SHALL BE 4 FEET WITHIN LIMITS SHOWN
- B. MINIMUM COVER OVER CASING FOR RAILWAY CROSSING SHALL BE 6 FEET WITHIN LIMITS SHOWN
- C. COVER DEPTH GREATER THAN MINIMUMS MAY BE REQUIRED AS A CONDITION OF AUTHORITY HAVING JURISDICTION FOR ROAD OR RAILROAD

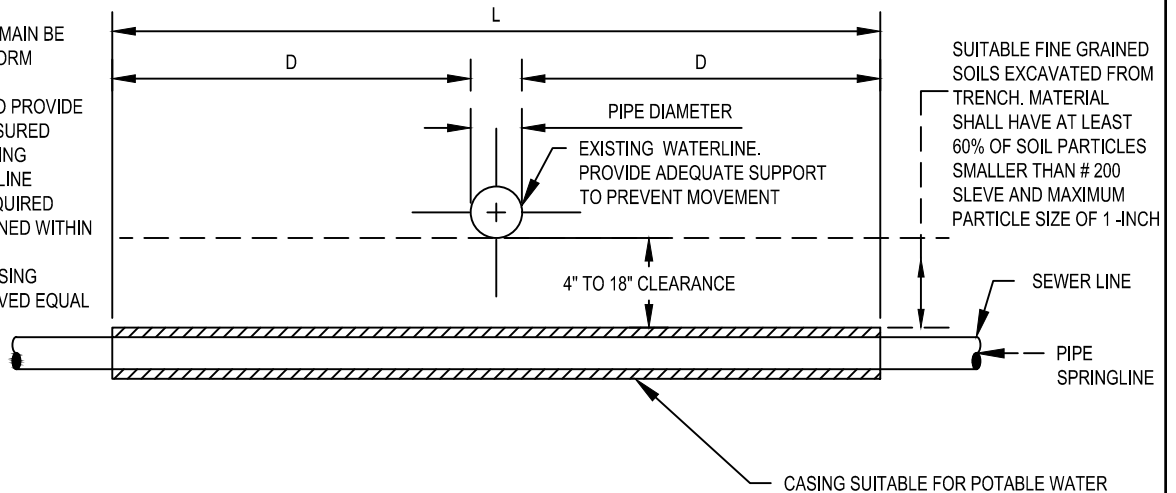


STANDARD DETAIL 02004
 TYPICAL SEWER MAIN IN CASING
 CITY OF MOBERLY - SANITARY SEWER SYSTEMS

10-09-2019

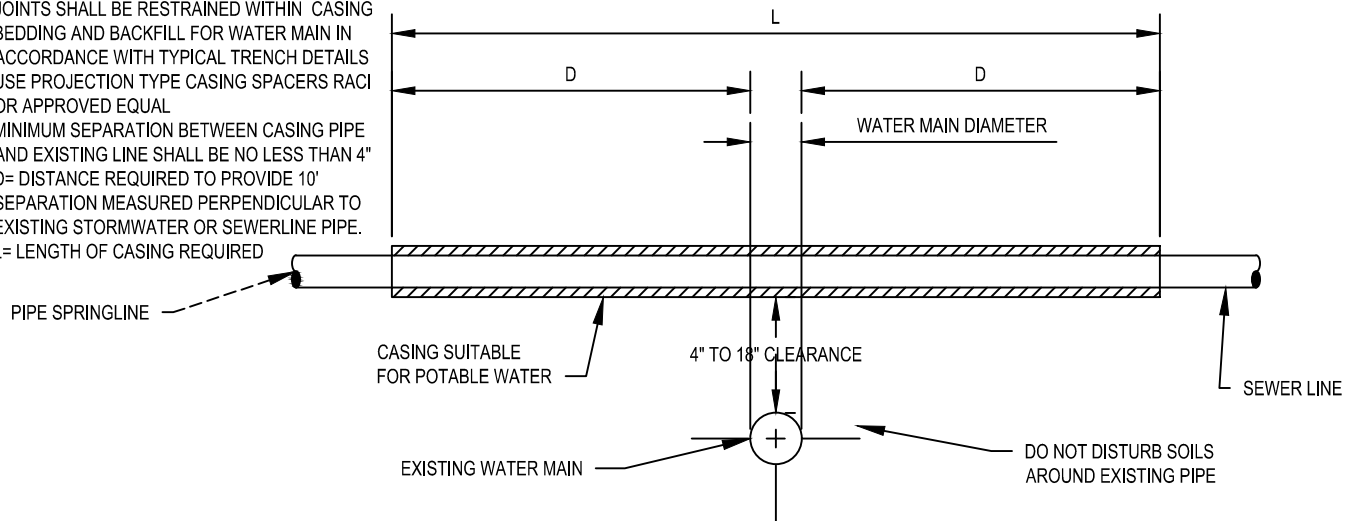
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1. BACKFILL FROM 1' ABOVE PIPE UP TO SURFACE IN ACCORDANCE WITH TYPICAL TRENCH DETAILS
2. IN NO CASE SHALL WATER MAIN BE LESS THAN 1.5' BELOW STORM WATER OR SEWER LINE
3. D= DISTANCE REQUIRED TO PROVIDE 10 FEET SEPARATION MEASURED PERPENDICULAR TO EXISTING STORMWATER OR SEWER LINE
4. L= LENGTH OF CASING REQUIRED
5. JOINTS SHALL BE RESTRAINED WITHIN CASING
6. USE PROJECTION TYPE CASING SPACERS, RACI OR APPROVED EQUAL



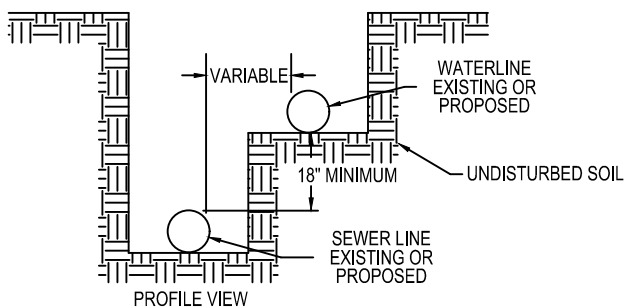
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" VERTICAL CLEARANCE

1. JOINTS SHALL BE RESTRAINED WITHIN CASING
2. BEDDING AND BACKFILL FOR WATER MAIN IN ACCORDANCE WITH TYPICAL TRENCH DETAILS
3. USE PROJECTION TYPE CASING SPACERS RACI OR APPROVED EQUAL
4. MINIMUM SEPARATION BETWEEN CASING PIPE AND EXISTING LINE SHALL BE NO LESS THAN 4"
5. D= DISTANCE REQUIRED TO PROVIDE 10' SEPARATION MEASURED PERPENDICULAR TO EXISTING STORMWATER OR SEWERLINE PIPE.
6. L= LENGTH OF CASING REQUIRED

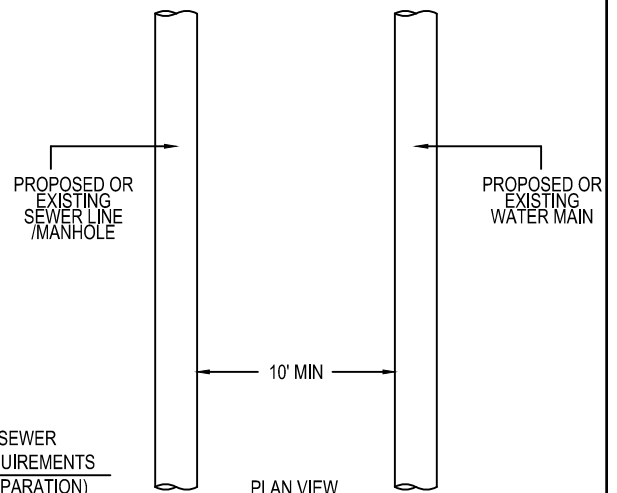


PROPOSED SEWER LINE ABOVE EXISTING WATER MAIN WITH LESS THAN 18" VERTICAL SEPARATION

PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR LESS FROM EXISTING WATER (OR SEWER).



WATER AND SEWER SEPARATION REQUIREMENTS (VERTICAL SEPARATION)



WATER AND SEWER SEPARATION REQUIREMENTS (HORIZONTAL SEPARATION)

STANDARD DETAIL 02005
TYPICAL WATER/SEWER MAIN SEPARATION REQUIREMENTS
CITY OF MOBERLY - SANITARY SEWER SYSTEMS

10-09-2019

PSBA

POEPPING, STONE, BACH & ASSOCIATES, INC.

ARCHITECTS ENGINEERS PLANNERS SURVEYORS

100 S 54TH ST, P.O. BOX 709 • QUINCY, IL 62306 • PHONE 217/223-4605

3523 MAIN ST, P.O. BOX 817 • KEOKUK, IA 52632 • PHONE 319/524-8730

U.S. FEDERAL BUILDING STE 248

801 BROADWAY P.O. BOX 190 • HANNIBAL, MO 63401 • PHONE 573/406-0541

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City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: City Clerk
 Date: November 18, 2019

Agenda Item: A Resolution appropriating money out of the Treasury of the City of Moberly, Missouri.

Summary: Appropriation Resolution.

Recommended

Action: Please approve this Resolution.

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Role Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input type="checkbox"/> Staff Report	<input type="checkbox"/> Proposed Ordinance	M___ S___ Jeffrey	___	___
<input type="checkbox"/> Correspondence	<input checked="" type="checkbox"/> Proposed Resolution	Council Member		
<input type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M___ S___ Brubaker	___	___
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M___ S___ Kimmons	___	___
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M___ S___ Davis	___	___
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M___ S___ Kyser	___	___
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

BILL NO. _____

RESOLUTION NO. _____

A RESOLUTION APPROPRIATING MONEY OUT OF THE TREASURY OF THE CITY OF MOBERLY, MISSOURI IN THE AMOUNT OF \$823,163.21.

WHEREAS, the funds are to be disbursed as follows;

SECTION 1: There is hereby appropriated out of the **General Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$92,558.29.

SECTION 2: There is hereby appropriated out of the **Payroll Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$473.00.

SECTION 3: There is hereby appropriated out of the **Solid Waste Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$61,322.55.

SECTION 4: There is hereby appropriated out of the **Heritage Hills Golf Course Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$396.29.

SECTION 5: There is hereby appropriated out of the **Parks and Recreation Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$568,630.17.

SECTION 6: There is hereby appropriated out of the **Airport Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$16,847.92.

SECTION 7: There is hereby appropriated out of the **Veteran Memorial Flag Project Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$21.00.

SECTION 8: There is hereby appropriated out of the **Utilities OP & Maintenance Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$68,188.64.

SECTION 9: There is hereby appropriated out of the **Emergency Telephone Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$1,283.58.

SECTION 10: There is hereby appropriated out of the **Transportation Trust Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$9,201.03.

SECTION 11: There is hereby appropriated out of the **Street Improvement Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$1,594.83.

SECTION 12: There is hereby appropriated out of the **Downtown CID Sales Tax Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$1,967.00.

SECTION 13: There is hereby appropriated out of the **Downtown CID Property Tax Fund** of the Treasury of the City of Moberly, Missouri to pay expenses due November 18, 2019 in the amount of \$678.91.

NOW, THEREFORE, the Moberly City Council authorizes these expenditures.

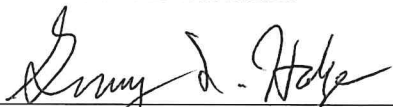
RESOLVED this 18th day of November 2019 by the Council of the City of Moberly, Missouri.

ATTEST:

Presiding Officer

City Clerk

I hereby certify that there is sufficient money standing to the credit of the City of Moberly, Missouri, unappropriated in the several funds covered by this resolution to meet the requirements of this resolution.



City Treasurer, City of Moberly, Missouri

**EXPENSES PAID NOVEMBER 2 - 14, 2019 FOR THE
FOLLOWING FUNDS ARE TO BE INCLUDED WITH THE
NOVEMBER 18, 2019 APPROPRIATION RESOLUTION TOTAL.**

General Fund	\$	92,558.29
Payroll Fund	\$	473.00
Solid Waste Fund	\$	61,322.55
Heritage Hills Golf Course Fund	\$	396.29
Parks and Recreation Fund	\$	568,630.17
Airport Fund	\$	16,847.92
Veteran Memorial Flag Project Fund	\$	21.00
Utilities OP & Maintenance Fund	\$	68,188.64
Emergency Telephone Fund	\$	1,283.58
Transportation Trust Fund	\$	9,201.03
Street Improvement Fund	\$	1,594.83
Downtown CID Sales Tax Fund	\$	1,967.00
Downtown CID Property Tax Fund	\$	678.91
Total	\$	823,163.21

I hereby certify that there is sufficient money standing to the credit of the City of Moberly, Missouri, unappropriated to cover the above funds.



City Treasurer, City of Moberly, Missouri

11/14/2019
Date

ACCOUNTS PAYABLE CHECK REGISTER

BANK#	BANK NAME	ACCOUNT#	NAME	CHECK AMOUNT	CLEARED	MANUAL	VOID	REASON FOR VOID
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24 DISBURSEMENTS

81869	11/08/2019	2975	BRENTAG MID SOUTH INC	39,810.80				
81870	11/08/2019	194	DMC CONCRETE CONSTRUCTION	7,300.00				
81871	11/08/2019	1308	FEHLING SMALL ENGINE LLC	860.80				
81872	11/08/2019	1719	HTE TECHNOLOGIES	186.85				
81873	11/08/2019	801	BENN RYAN D	150.00				
81874	11/08/2019	2223	US CELLULAR	321.81				
81875	11/14/2019	3055	ADVANCED DISPOSAL - MACON	61,943.53				
81876	11/14/2019	2813	AHRENS STEEL & WELDING	193.68				
81877	11/14/2019	4207	ALPHA MEDIA LLC	85.00				
81878	11/14/2019	3581	AMTEC LESS LETHAL SYSTEMS	921.42				
81879	11/14/2019	20	ARNSPERGER MARK	8.00				
81880	11/14/2019	30	ARTDEP+BENTON	306.50				
81881	11/14/2019	4504	AT&T 5011	635.00				
81882	11/14/2019	4985	BAUDVILLE	53.45				
81883	11/14/2019	27	BEELMAN LOGISTICS LLC	1,104.05				
81884	11/14/2019	34	BOB'S TIRE, LLC	967.00				
81885	11/14/2019	5057	BOONE CONSULTING	2,900.34				
81886	11/14/2019	2605	BRATCHER'S MARKET	98.84				
81887	11/14/2019	2759	CALCAGNO MARY	13.77				
81888	11/14/2019	4941	CAPITAL PAVING & CONST LLS	552,730.34				
81889	11/14/2019	104	CARTER-WATERS	276.50				
81890	11/14/2019	594	BROOKS JIM	21.00				
81891	11/14/2019	598	CHARITON VALLEY COMMUNICATIONS	168.98				
81892	11/14/2019	1301	CINTAS CORPORATION	169.62				
81893	11/14/2019	3137	CINTAS CORPORATION #379	54.58				
81894	11/14/2019	4006	CITY OF COLUMBIA	1,000.45				
81895	11/14/2019	1405	CLAYPOOLE NURSERY LLC	145.00				
81896	11/14/2019	653	COE EQUIPMENT	593.41				
81897	11/14/2019	3063	CONLEY FOREST DO	40.00				
81898	11/14/2019	2645	CORE & MAIN LP	2,710.05				
81899	11/14/2019	2913	CULLIGAN WATER CONDITIONING	58.45				
81900	11/14/2019	2951	CUMMINS MID SOUTH LLC	6,665.11				
81901	11/14/2019	2908	CUNNINGHAM VOGEL & ROST PC	10,317.56				
81902	11/14/2019	2908	CUNNINGHAM VOGEL & ROST PC	1,067.00				
81903	11/14/2019	118	D & L TRENCHING INC	2,400.00				
81904	11/14/2019	5797	DA-COM	200.00				
81905	11/14/2019	5869	DEJONGE BRUCE	1,260.00				
81906	11/14/2019	695	ENGINEERING SURVEYS & SERVICES	671.00				
81907	11/14/2019	5932	EXCEL DRYWALL, LLC	7,450.00				
81908	11/14/2019	3103	FASTENAL COMPANY	.00				
81909	11/14/2019	3103	FASTENAL COMPANY	1,477.02				
81910	11/14/2019	3882	ED M FELD EQUIPMENT	27,499.00				
81911	11/14/2019	704	GALLS LLC	243.32				
81912	11/14/2019	3012	GENERAL PRINTING INC	208.78				
81913	11/14/2019	5837	GWORKS	16,036.24				
81914	11/14/2019	2852	H & H HEALTH ASSOCIATES INC	5,318.40				
81915	11/14/2019	1338	HAWKINS INC	1,770.30				
81916	11/14/2019	2916	ICMA MEMBERSHIP RENEWALS	856.80				
81917	11/14/2019	761	IIMC	305.00				
81918	11/14/2019	763	SUMNER ONE	270.59				
81919	11/14/2019	4336	KEY EQUIPMENT & SUPPLY CO.	869.00				

VOID:

ACCOUNTS PAYABLE CHECK REGISTER

BANK#	BANK NAME	ACCOUNT#	NAME	CHECK AMOUNT	CLEARED	MANUAL	VOID	REASON FOR VOID
81920	11/14/2019	89	KINDER MACHINE TOOL & DIE	15.00				
81921	11/14/2019	1381	LEON UNIFORM COMPANY	503.90				
81922	11/14/2019	1246	LOCHNER	16,404.32				
81923	11/14/2019	3015	LOWE'S HOME CENTERS, LLC	798.33				
81924	11/14/2019	1565	MACON ELECTRIC COOP	40.46				
81925	11/14/2019	926	MAGIC CITY BUILDERS	372.50				
81926	11/14/2019	801	BENN RYAN D	90.00				
81927	11/14/2019	5782	MAMRE FARM LLC	678.91				
81928	11/14/2019	5611	MCCLURE ENGINEERING COMPANY	1,875.00				
81929	11/14/2019	1058	MEFFORD SARAH	100.00				
81930	11/14/2019	1694	MFA AGRI SERVICE CENTER	108.55				
81931	11/14/2019	1688	MFA OIL COMPANY	3,742.17				
81932	11/14/2019	260	MIDLAND GIS SOLUTIONS	125.00				
81933	11/14/2019	2889	MISSOURI DEPART OF CORRECT	997.50				
81934	11/14/2019	2747	MO MUNICIPAL LEAGUE	50.00				
81935	11/14/2019	3041	MO ONE CALL SYSTEM INC	337.20				
81936	11/14/2019	1935	MOBERLY MONITOR INDEX	970.90				
81937	11/14/2019	1970	KITCHEN DAMON	370.00				
81938	11/14/2019	1604	NAPA AUTO PARTS OF MOBERLY	.00				VOID:
81939	11/14/2019	1604	NAPA AUTO PARTS OF MOBERLY	.00				VOID:
81940	11/14/2019	1604	NAPA AUTO PARTS OF MOBERLY	.00				VOID:
81941	11/14/2019	1604	NAPA AUTO PARTS OF MOBERLY	1,867.50				
81942	11/14/2019	2152	NEMO ELECTRIC CO INC	1,701.50				
81943	11/14/2019	3079	NEWMAN COMLEY & RUTH PC	652.50				
81944	11/14/2019	2865	NEWMAN SIGNS INC	331.00				
81945	11/14/2019	2737	NORTH MO DRUG TASK FORCE	4,800.00				
81946	11/14/2019	5931	NOVIQU INC	900.00				
81947	11/14/2019	2299	O'REILLY AUTOMOTIVE STORES INC	.00				VOID:
81948	11/14/2019	2299	O'REILLY AUTOMOTIVE STORES INC	1,201.45				
81949	11/14/2019	5727	PEST PRO SOLUTIONS INC	95.00				
81950	11/14/2019	2596	PLUMB SUPPLY COMPANY	31.58				
81951	11/14/2019	5829	Q SECURITY SOLUTIONS	198.00				
81952	11/14/2019	4924	R P LUMBER COMPANY INC	127.91				
81953	11/14/2019	415	RANDOLPH AREA YMCA	1,162.50				
81954	11/14/2019	4138	RANDOLPH COUNTY 4-H COUNCIL	100.00				
81955	11/14/2019	5929	SCHMITT DANIELLE	100.00				
81956	11/14/2019	2610	BRENDLINGER ENTERPRISES INC	11,936.39				
81957	11/14/2019	494	SOCKET TELECOM LLC	.00				VOID:
81958	11/14/2019	494	SOCKET TELECOM LLC	2,543.36				VOID:
81959	11/14/2019	5700	STAPLES	.00				VOID:
81960	11/14/2019	5700	STAPLES	653.62				
81961	11/14/2019	2821	HOLCOMB MICHAEL F	468.00				
81962	11/14/2019	488	SUPERIOR ADVENTURE CENTER	197.46				
81963	11/14/2019	47	TUCKER PLUMBING & HTG LLC	1,215.00				
81964	11/14/2019	5308	UNITED WAY OF RANDOLPH COUNTY	110.25				
81965	11/14/2019	2223	US CELLULAR	560.93				
81966	11/14/2019	2644	USA BLUE BOOK	563.20				
81967	11/14/2019	3217	BERNIE VALDEZ JR	1,198.94				
81968	11/14/2019	2484	VERMEER OF MISSOURI & ILLINOIS	70.00				
81969	11/14/2019	2652	WATER & SEWER SUPPLY INC	242.04				
81970	11/14/2019	2656	WESTLAKE HARDWARE	.00				VOID:
81971	11/14/2019	2656	WESTLAKE HARDWARE	.00				VOID:
81972	11/14/2019	2656	WESTLAKE HARDWARE	.00				VOID:

ACCOUNTS PAYABLE CHECK REGISTER

BANK#	BANK NAME	ACCOUNT#	NAME	CHECK AMOUNT	CLEARED	MANUAL	VOID	REASON FOR VOID
81973	11/14/2019	2656	WESTLAKE HARDWARE	1,741.00				
81974	11/14/2019	5930	WORLEY DENNIS	100.00				

* See Check Summary below for detail on gaps and checks from other modules.

BANK TOTALS:	
OUTSTANDING	823,163.21
CLEARED	.00

BANK 24 TOTAL	823,163.21
 VOIDED	 .00

FUND	TOTAL	OUTSTANDING	CLEARED	VOIDED
100 GENERAL FUND	92,558.29	92,558.29	.00	.00
105 PAYROLL FUND	473.00	473.00	.00	.00
110 SOLID WASTE FUND	61,322.55	61,322.55	.00	.00
114 HERITAGE HILLS GOLF CRSE	396.29	396.29	.00	.00
115 PARKS & RECREATION FUND	568,630.17	568,630.17	.00	.00
120 AIRPORT FUND	16,847.92	16,847.92	.00	.00
140 VETERAN MEMORIAL FLAG PRJ	21.00	21.00	.00	.00
301 UTILITIES OP & MAINT	68,188.64	68,188.64	.00	.00
400 EMERGENCY TELEPHONE FUND	1,283.58	1,283.58	.00	.00
600 TRANSPORTATION TRUST FUND	9,201.03	9,201.03	.00	.00
601 STREET IMPROVEMENT FUND	1,594.83	1,594.83	.00	.00
911 DOWNTOWN CID SALES TAX	1,967.00	1,967.00	.00	.00
912 DOWNTOWN CID PROP TAX	678.91	678.91	.00	.00

ACCOUNTS PAYABLE CHECK REGISTER
***** CHECK SUMMARY *****

BANK#	BANK NAME	DESCRIPTION
CHECK#		

24 DISBURSEMENTS

81869 Thru 81974 Accounts Payable Checks

City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: City Manager
 Date: November 18, 2019

Agenda Item: Department Head Monthly Reports

Summary: Attached is Community Development Monthly Report/Public Works Monthly, Finance Department Monthly Report, Parks and Rec. Monthly Report, Police Department Monthly Report, Fire Department Monthly Report, Public Utility Monthly Report, Moberly Area Economic Development, Moberly Chamber of Commerce.

These are for you to review on the activity that each Department has accomplished for the Month October.

Recommended

Action: Just for your review

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input checked="" type="checkbox"/> Staff Report	<input type="checkbox"/> Proposed Ordinance	M___ S___ Jeffrey	___	___
<input type="checkbox"/> Correspondence	<input type="checkbox"/> Proposed Resolution	Council Member		
<input type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M___ S___ Brubaker	___	___
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M___ S___ Kimmons	___	___
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M___ S___ Davis	___	___
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M___ S___ Kyser	___	___
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

COMMUNITY DEVELOPMENT/PUBLIC WORKS MONTHLY REPORT

October 2019

A. PROJECTS

Public Work/Community Development

Fennel Building and Associated Property – In following up with Holman Excavation, they have indicated that they intend to be back to work on removing the roof of the Pro Auto building this week. We need to get this cleared off to have a better understanding of where we are at with it for bids to replace roof.

SSE Engineering has provided us roof designs for all of the facilities. Once we have the pro auto roof, we will be requesting bids for all of the buildings.

Street Maintenance

Schueneman Street - as paved with asphalt over the existing gravel roads. It was never designed for heavy commercial use. Additionally, the road ditches out there have very little fall and don't drain, on top of that there is no sanitary sewer and that water drains to the ditches as well. In the past the road was equal or higher than the surrounding property but filling of the lots has pushed all the water to the ditches and over the roads. With the water standing the base is failing and will not support roads for heavy loads. Randolph County Foundation has been in there for several years and they have huge heavy concrete pumper trucks that are blowing the road out. We have tried to fill the holes with millings, rock and even concrete. The base is too soft from the water laying in there. Last year we had a contractor put in drainage along Sparks as deep and as flat as possible to make it drain. We were hopeful it would be deep enough to drain Schueneman. It does take some of the water from the South end, but large volumes remain keeping the subbase swampy. With the chunks of asphalt in place we couldn't grade the road to try and keep the holes filled so I recently had Capital mill the entire road full depth and leave the millings in place. Our goal was to grade them back and put in some large rock as a base course and pack the millings in on top and effectively raise the road. The cold and wet has come in early on us and the road is very soft at this point. We will continue to try and get large rock in place under the surface and take some additional drainage measures, but it will likely get worse before it gets better. The South half of the road was impassible for much of last year, we had to take drastic measures, and we are working in a swamp that has no clear point of drainage.

Street striping – Remole Painting has some work and re-work (downtown parking spaces) remaining. He will try to get some additional work completed this year as weather permits. Remaining work will be completed next Spring.

Mixed Glass Recycling Grant – We finally have an MOU that Randall and MTSWD agreed to. The MOU is standard for these types of grants and puts a 5-year prorated value on all of the equipment in the event that we ceased our operations prior to 5 years, they would require payback on a prorated value of the items the grant purchased. As long as we continue to use the equipment and don't sell or lease the ground that the bunker is constructed on for 5 years, the City will own everything outright at that point.

It will be difficult to try and start the glass recycling project at this time of year. Once we have this executed and approved to proceed, we will get the truck, trailer & bunker bid out and acquired with the hope to start next Spring.

Governor's Cost Share Grant – This application was a long shot, but too much money not to try for. The grant is still pending at this time. We did have a follow up from MoDOT requesting some additional maps that clarified the specific roads that we were intending to work on, so that did feel somewhat hopeful that it didn't simply get brushed aside.

Demolition Grant – We still have not gotten word on this. I was hopeful that we would have word as to the status prior to the upcoming meeting on the 18th, and that is still possible, but not looking as likely as I had hoped. I am confident that we have a strong application and that we have a very good chance of success on this.

Route M Phase II – This headache of a project appears to be coming along with the bid opening on the 14th prior to the council meeting, we will have receipt of bids on the agenda for an initial review but may not be able to make a recommendation at the time of the council meeting. We will have to check their references and rerun the estimates to make sure we are in agreement with the bid figures.

Fisk Avenue RTP - Following up with the contractor, he assures me they will be starting on this full force the week of Nov. 25th. There should still be a window for them to finish the project as they have the culvert pipe extended. As long as the Dept. of Conservation is on board, as they are funding the majority of this project, I think they will still have the window necessary to complete the project this year.

St. Pius Crosswalk– Staff has received the new equipment and the crosswalk is working fine now. We have had reports from a few people that those involved are happy with the new layout. Additionally, the changes we made in on-street parking South of Wightman on Williams has greatly improved visibility at that intersection. It would seem that we have rectified the concerns in this area.

Historic District Study – Ruth Keenoy e-mailed me on 10/29 to discuss the status of our efforts. The federal reviewer would not say whether she thinks the district is eligible, even if we could address all of her comments. Michelle with SHPO thinks we have a fighting chance but there is no guarantee on getting the district listed even after we resubmit with all comments addressed.

The worst-case scenario would be an answer of "not eligible". In this situation, we would have to consider listing the three buildings that we want on the register (Auditorium, Kelly Hotel & Commerce), but it does mean they would have to go through the Council as individual nominations. The earliest date for that is March 2020.

Garfield & Harrison CDBG Curb & Gutter project – We recently received the re-bids on this, and staff recommended Willis Brothers for the work, even though they were not the lowest bid. They were more experienced with residential water lines and documented their experience as required by the bid.

I understand there was some questions raised about the potential increase to downstream stormwater flow as a result of this project. The improvements to these two streets are estimated to have possibly a 5 to 10% overall impact to the downstream area of concern. The utilities department, who is over stormwater, had been actively working with Bartlett & West for a large detention project that would address the existing concerns in the downstream area as well as any

potential increase that might be created as a result of this project. Based on that ongoing effort, I didn't see a need for this project to investigate and try to address the same impact area.

Utilities has been aware of the proposed efforts and participating in it, as new water lines are to be installed all along the work area and even beyond the curb and gutter work area by a couple of blocks with new water lines North of Carpenter.

When I learned that the projected cost of the comprehensive detention project was going to be in excess of \$400,000 and unbudgeted, I can certainly understand the council's concern. Brian, Mary and I met to discuss what we could do. I had already been meeting with Willis Brothers as to areas we could cut costs on the Curb & Gutter/water line project. Willis Brothers has extensive experience with stormwater/detention basins. I suggested we meet with them about reducing the proposed scope of detention that was initially suggested by Bartlett & West, scaling it back to address what we could do on existing City property and working a change order with Willis Brothers to do the work under the Garfield & Harrison contract. Much of the unit prices are already included in the bid, and they will have good insight as to what they could do for us and keep the price down. Staff departments, Willis Brothers and Bartlett & West have discussed this and were all on board. We have reviewed the City properties at Fox Park and the drainage easement South of McKinsey and feel like we can make enough improvements there to more than eliminate any impact from the proposed project and make reductions in excess of 10% to the existing stormwater flow in the area. We are hopeful that we can off-set much of the cost of this proposed detention with cost savings found in Curb & Gutter project. We are waiting on some excavation quantities from Bartlett & West currently.

CID District Improvements – We have engineering plans and cost estimates for a multi-component project in the downtown district that would install traps at the intersections in the downtown where storm sewers connect to sanitary sewers to hopefully greatly reduce or eliminate the sewer odor at the intersections, also install brick style cross walks in the form of a pave way surface application process or a stamped/colored concrete process (depending on costs), construct planter bump outs and landscape them, line the manholes in the area and the last part of this project would be some sanitary sewer improvements. We are anticipating utilities will be able to provide that list of work in the near future to complete the project scope so that we can bid this combined project in early 2020.

PR/Communications/Grant Specialist – Emily Goyea-Furlong – October Monthly Report

- Manage all City of Moberly social media accounts
- Managed city's website content.
- Created press releases and dispersed them to media outlets
- Spoke with business owners and collected agreements for murals/banners
- Attended bi-weekly City Council meetings.
- Collected information regarding trash containers corrections and additions and forwarded to Advanced Disposal
- Attended BCBH Coalition Meeting at Randolph Co. Health Dept. and participating in coalition
- Participating in Building Communities for Better Health data collection coalition
- Worked on SHPO grant, VW grant and Tree City USA grant
- Worked to coordinate DNR permit for glass recycling at the transfer station.
- Participated in transportation needs meeting at Randolph County Caring Communities.
- Contacted vendors to collect quotes for Reed St. and Coates St. lighting project.
- Attended Wine and Shine
- Coordinating the photos and design for Route 36 travel magazine ad.
- Began researching and discussions regarding a new EAA chapter at Omar Bradley Airport.

- Attended, and promoted, Coffee with a Cop.
- Worked collectively with Carla to coordinate the United Way drive for the City of Moberly.
 - This included meetings with each department and all first responder shifts.
- Participated in post meeting regarding the Omar Bradley Fly-In
- Participated in community ribbon cutting at Howard Hills.
- Chaired the tourism committee meeting
- Completed tourism app requesting tourism funding for mural project.
- Attended HPC and CID meetings to discuss mural and banner project.
- Participated in meetings regarding possible wedding venue destination plan
- Coordinated the city's participation in the employer showcase
- Created visual material for employer showcase.
- Engaged in discussions and proposals for America Walks grant.
- Attended Historical Society board meeting
- Attended Main St. Moberly board meeting

Cemetery Department

There were two (2) grave lots sold; five (5) graves opened; and nine (9) monument permit sold during the month of October.

B. Planning & Zoning Commission

The Planning and Zoning Commission for the City of Moberly will meet in session on **Monday, October 28, 2019 at 6:00 p.m.** in the Council Chambers of City Hall to conduct a public hearing on the following items at that time:

1. Vic Burks gave a brief presentation on the Comp Plan and Future Land Use Map.

Planning & Zoning

Warming Shelter/Homeless Shelter – I have some suggested language from our consultant that I have reviewed and passed along to our attorney to review and make recommendation as to format for our zoning regulations. Once we have that completed, we will present that proposed language to P&Z and based on their decision, we hope to bring to council soon.

C. Code Enforcement

Occupancy Inspection – I am meeting with the Landlords association the evening of November 12th to go over the requirement of the owner providing documentation to the City in writing designating an authorized property manager. They are not required to have a property manager, but unless the owner has designated a person, we will not accept appointments, perform inspection with or take actions based on the word of people not authorized by the owner. Without these in place, anyone could call up here and schedule inspection on any property, inspectors could be entering houses with people without the owner's knowledge and we could be taking actions from representatives that are not authorized by the owner to speak for them. We recently entered a property with an "agent" of property and the owner was unaware, and the occupant was sleeping in the house and was awoken by the agent and inspector and occupant pulled a gun on the agent and staff member. It's important that we can verify the person we are dealing with is formally authorized by the owner.

I will also be going over the requirement to have the tenants name listed on the water records. This is something we continually fight.

Month of October: Rick

- Completed 21 building inspections.
- Issued 27 building permits to contractors
- Attended Planning and Zoning October meeting.
- Violation notices to 617 & 623 Promenade for abatement owners completing.
- Attended MACA meeting in Ozarks on updating building codes for 2012 to 2018.
- Attended annual Lagers meeting in Springfield.
- Violation notice to 309 E. Carpenter for nuisance debris.
- Working on nuisance abatement to 705 Garfield Ave and property maintenance violation have been in contact with owner in resolving.
- Remainder of month was issuing permits, answering phones, code violations, commercial occupancy permits and zoning matters.

Month of October: Karen

- 149 inspections, letters and notices.
 - 87 occupancy inspections
 - 60 re-inspections
 - 2 others
- Returned phone calls.
- This month I inspected 36 apartments that had not been inspected for 7-10 yrs. and I think I made some improvements to the complex.
- Attended Plan Review meeting as they are scheduled.
- October saw our annual health fair. The safety committee hosted and provided lunch to all vendors and employees as well as providing gift card to employees.

Month of October: Aaron

- During the month of October, we performed several plan reviews on residential homes as well as many inspections. The month of October was centered around inspections shifting focus to commercial more than residential, plan review internally, and reviewing open caseloads and documentation to close cases. Historic Preservation was not very busy this month. We had a meeting, but fewer applications came through than usual.
- Commercial and Residential inspections were frequent this month, zoning reviews, and plan reviews combined with residential ones kept the office busy between handling Code Enforcement issues. (plan reviews:1 zoning reviews:2 permits issued: 18 Commercial Inspections: 15 Residential Inspections: 20 Historic Preservation Inquiries: 1 Business License Reviews: 4)
- As for code enforcement activity, we are shifting our focus to property maintenance and condemnable properties. Following up on public hearings and starting the process on properties that do not have active owners. Several abatements were sent out for the month (5) of which (3) complied by the owner and the remaining two were being scheduled for November. Routine inspections of all aspects with the Moberly Inn have been investigated and clearance to proceed with sections of the roof have been passed. The remaining roof will be inspected as they remove the shingles but before they put new back. Also the 500 suites have been demolished and awaiting contractors to come in to abate the mold and test the electrical and plumbing before covering the walls and ceilings back up. Also several buildings in the downtown have made significant progress and I have begun communication with other building owners to put plans in place to repair their buildings.

City of Moberly - Street Department

Man-Hours Allocated by Task, Materials Used & Purchased - Month & Year

MAINTENANCE FACILITY					
	Hours	O/T	Loads	Tons	Cost
Compost Mixing	0	0	0	0	\$0.00
Load Compost, Millings, & Mulch	9	0	56	0	\$0.00
Sand, Salt, & Geomelt Mixing	0	0	0	0	\$0.00
Tub Grinder Operation	15	0	0	0	\$0.00
Winter Weather Equipment Preparations	0	0	0	0	\$0.00
ROADS & ALLEYWAYS					
	Hours	O/T	Loads	Tons	Cost
Alleys, Grade & Rock	12	0	0	16.5	\$0.00
Catch Basin Maintenance	101.5	0	0	0	\$0.00
Crack Sealing	0	0	0	0	\$0.00
Culvert Flushing	8	0	0	0	\$0.00
Culvert Installation	38	0	0	12	\$0.00
Curb Repair	0	0	0	0	\$0.00
Ditch Maintenance	5	0	0	0	\$0.00
Ice & Snow Removal	64	0	0	0	\$0.00
Milling	0	0	0	0	\$0.00
Mowing, Right-Of-Ways	69	0	0	0	\$0.00
Rock Loaded/Hauled	37	0	37	8	\$0.00
Street Repair & Maintenance	377	0	3	3	\$0.00
Street Sign Maintenance	87	0	0	0	\$0.00
Street Sweeper Operation	130	0	38	0	\$0.00
Street Sweepings Hauled To Disposal	0	0	0	0	\$0.00
Weedeating & Brush Removal, Alleys	32	0	8	0	\$0.00
Weedeating & Brush Removal, Streets	43	0	28	0	\$0.00
Weedkiller Application, Alleys	14	0	8	0	\$0.00
Weedkiller Application, Streets	0	0	0	0	\$0.00
MISCELLANEOUS					
	Hours	O/T	Loads	Tons	Cost
Inmate Labor	805	0	0	0	\$0.00
Mowing, City Lots	45.5	0	0	0	\$0.00

Outer Road Fill Dump Site Grading	28	0	0	0	\$0.00
Sidewalk Maintenance	40	0	0	0	\$0.00
Trash Removal & Clean-Up, Downtown	18	0	84	0	\$0.00
Trash Removal & Clean-Up, All Wards	0	0	0	0	\$0.00
FACILITIES & EQUIPMENT MAINTENANCE					
	Hours	O/T	Loads	Tons	Cost
Airport Maintenance	8	0	0	0	\$0.00
Building Maintenance	6	0	0	0	\$0.00
Cemetery Maintenance	300	0	0	0	\$0.00
Grounds Maintenance	72	0	0	0	\$0.00
Landfill Maintenance	2	0	0	0	\$0.00
Maintenance Facility Maintenance	16	0	0	0	\$0.00
Wash Trucks & Equipment	0	0	0	0	\$0.00
MATERIALS PURCHASED					
	Loads	Tons	Cubic Yards	Gallons	Cost
Asphalt	0	0	0	0	\$0.00
Road Marking Paint, White	0	0	0	0	\$0.00
Road Marking Paint, Yellow	0	0	0	0	\$0.00
Salt	2	47.7	0	0	\$0.00
Sand	0	0	0	0	\$0.00
MECHANIC WORK PERFORMED					
	Units	Hours			
Routine Service	17	43			
Maintenance And Repair	68	93			

To: Moberly City Council; Brian Crane, City Manager
From: Greg Hodge, Director of Finance *GH*
Subject: Monthly Report – October 2019

General Information

The new financial auditing firm, Williams Keepers, was on-site for 3 days, October 14-16. We covered a lot of items with them while they were here and continued those processes electronically through the end of the month. We will continue working through November to get information to them as they request it. This being the first year working with us is taking more time, but they feel that the December 15 deadline for the audit report is not in any jeopardy. Thus far I am very impressed with them. The staff are very professional and easy to work with, and their processes and methods are more electronic based versus running reams of reports.

I hope to have the refresh of the City Hall building wrapped up in November. Replacement of the ceiling tiles in the Council Chamber and hallway was completed near the end of October, and bids from painting contractors were also received at the end of the month. Willy's Painting provided the successful bid and he anticipates being on the job by mid-November. He will be doing some of the work after hours and on weekends to minimize exposure of staff and the public to paint fumes and wet paint.

We relocated Randall to Melissa's former office space during the month to make it easier for him to interact with staff and accomplish his duties. The hustle, bustle, and noise of City Hall will be an adjustment from the solitude of the Municipal Building, but I'm sure that is preferable over having to traipse through ice, snow, and the cold to do his business with City Hall staff.

Sales Tax Revenues

Included for your information are charts illustrating the sales tax revenues. General Fund sales tax receipts gained ground again this month, finishing at 0.13% behind last year-to-date and the other regular sales taxes are now ahead of last year by 0.62%. The use tax receipts dropped off and are ahead of last year by 1.52%.

Health Trust Fund

Health claims were high again in October, nearly double "normal" at just under \$129,000. Pharmaceuticals were high also at \$30,439. I continue to monitor this fund as the balance continues to plummet and will advise you if we need to make an emergency injection of cash to keep the fund solvent.

Health Trust Fund Balance

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
July	\$845,859.67	\$868,756.32	\$953,912.59	\$959,446.10	\$789,647.32	\$600,499.65	\$452,115.58
August	\$844,809.45	\$874,161.89	\$950,828.33	\$978,085.80	\$800,479.76	\$558,026.39	\$289,833.52
September	\$772,680.01	\$974,093.54	\$1,000,905.00	\$974,427.10	\$684,692.43	\$519,407.60	\$239,111.95
October	\$924,366.04	\$946,611.09	\$1,008,278.61	\$990,003.69	\$665,224.98	\$533,065.43	\$161,101.66
November	\$916,526.48	\$983,197.01	\$1,000,000.00	\$1,000,000.00	\$689,931.75	\$521,176.81	
December	\$921,527.48	\$999,278.76	\$1,002,488.15	\$867,421.94	\$524,297.94	\$521,228.06	
January	\$949,084.37	\$1,000,000.00	\$997,205.10	\$888,519.67	\$590,612.39	\$549,457.98	
February	\$901,141.11	\$996,307.51	\$1,001,764.14	\$815,725.20	\$712,106.49	\$559,700.67	
March	\$1,001,141.14	\$1,000,000.00	\$980,176.79	\$762,230.98	\$587,567.48	\$578,509.63	
April	\$928,865.80	\$880,223.00	\$968,681.17	\$710,720.45	\$640,541.51	\$599,662.04	
May	\$924,669.38	\$899,497.24	\$1,000,000.00	\$762,796.66	\$608,960.67	\$543,627.95	
June	\$989,424.83	\$911,402.69	\$1,000,000.00	\$807,724.83	\$569,163.71	\$512,223.04	

Feel free to contact me with any questions or concerns.

TO THE HONORABLE MAYOR

and

CITY COUNCIL

of the

CITY OF MOBERLY, MISSOURI



Per RSMo 78.620 I have hereby filed an itemized statement of receipts and expenditures with the City Clerk for your review upon request.

I submit herein a summary of the business transactions for the month of

October 2019

A handwritten signature in black ink, appearing to read "Gregory L. Hodge", is written over a horizontal line.

Gregory L. Hodge, City Treasurer

City of Moberly Cash Balance Report - October 2019

Fund #	Fund Name	Beginning Cash Balance	Revenues	Transfers In	Expenditures	Transfers Out	Ending Cash Balance
100	General	1,350,813.56	558,067.74		609,007.38		1,299,873.92
102	Non-Resident Lodging Tax	173,883.46	9,625.14		7,500.00		176,008.60
105	Payroll	532,916.94	663.83		337.86		533,242.91
110	Solid Waste	756,699.65	90,063.17		81,846.66		764,916.16
114	Heritage Hills Golf Course	0.00	0.00	154.15	154.15		0.00
115	Parks and Recreation	13,359.10	51,193.83	104,074.94	154,368.77		14,259.10
116	Park Sales Tax	429,009.03	100,491.92		0.00	104,229.09	425,271.86
120	Airport	-3,511.44	15,279.65		50,607.41		(38,839.20)
125	Perpetual Care Cemetery Sales	286.23	0.00		0.00		286.23
126	Perpetual Care Cemetery Investment	476,207.41	593.60		0.00		476,801.01
137	Use Tax Trust	246,977.49	307.67		0.00		247,285.16
140	Veterans Memorial Flag Project	40,591.26	650.62		0.00		41,241.88
141	Community Betterment	3,490.18	0.00		0.00		3,490.18
300	Utilities Collection	5,775.35	504,672.72		(870.78)	405,450.61	105,868.24
301	Utilities Operation and Maintenance	60,674.76	0.00	261,986.11	261,986.11		60,674.76
302	Utilities Replacement	677,206.16	0.00	4,083.33	8,518.55		672,770.94
303	Utilities Operating Reserve	718,323.15	2,152.90	58,109.19	23,563.77		755,021.47
306	Utilities Consumer Security	197,514.77	5,040.12		0.00		202,554.89
307	Sugar Creek Lake Fund	56,052.10	133.27		0.00		56,185.37
377	2004B SRF Bonds Debt Service	1,022,729.94	1,274.15	43,896.46	37,898.57		1,030,001.98
378	2006A SRF Bonds Debt Service	1,449,618.36	1,805.88	37,375.52	26,842.53		1,461,957.23
379	2004C Bond Debt Service	49,125.32	61.26	29,464.17	25,756.20		52,894.55
380	2008A Bonds Debt Service	36,550.59	45.60	15,032.21	0.00		51,628.40
Escrow		<u>999,079.88</u>					999,079.88
Total CWWSS (funds 300-380)		5,272,650.38	515,185.90	449,946.99	383,694.95	405,450.61	5,448,637.71
304	Capital Improvement Trust	1,220,210.86	96,727.25		34,323.67	44,496.38	1,238,118.06
400	911 Emergency Telephone	57,197.55	33,898.43		41,115.39		49,980.59

City of Moberly Cash Balance Report - October 2019

Fund #	Fund Name	Beginning Cash Balance	Revenues	Transfers In	Expenditures	Transfers Out	Ending Cash Balance
406	Inmate Security Fund	12,835.58	63.96		0.00		12,899.54
408	Police Forfeiture Fund	4,320.59	0.00		0.00		4,320.59
600	Transportation Trust	1,713,889.45	98,966.33		674,007.15		1,138,848.63
601	Street Improvement	521,943.76	34,426.22		26,101.32		530,268.66
900	MODAG Grant/Loan	21,637.23	26.91		0.00		21,664.14
901	Misc. Project Residuals	47,368.39	58.98		0.00		47,427.37
903	Ameren MO Solar Rebates	416,130.00	0.00		0.00		416,130.00
905	ICSC/Buxton Scholarship	6,578.10	8.21		0.00		6,586.31
908	Railcar Preservation Fund	583.23	0.76		0.00		583.99
909	Lucille Manor CDBG Reimbursement	188,985.45	2,137.56		0.00		191,123.01
911	Downtown CID Sales Tax	(5,561.23)	3,465.90		1,138.50		(3,233.83)
912	Downtown CID Property Tax	116,424.43	145.02		0.00		116,569.45
995	Health Trust	139,111.95	<u>118,945.79</u>	100,000.00	195,445.67		162,612.07
995	Investments	100,000.00				100,000.00	0.00
Total Health Trust		239,111.95	118,945.79	100,000.00	195,445.67	100,000.00	162,612.07
Total Cash		13,855,028.59	1,730,994.39	654,176.08	2,259,648.88	654,176.08	13,326,374.10
Less Escrow Accounts		(999,079.88)					(999,079.88)
Less Investments		(100,000.00)					0.00
Less Petty Cash		(2,950.00)					(2,950.00)
Net Cash per Bank Cash Report		12,752,998.71	1,730,994.39	654,176.08	2,259,648.88	654,176.08	12,324,344.22

City of Moberly Budget Comparison Report - October 2019

		Percentage of Year Completed								33.33%
		Revenues				Expenditures				
Fund #	Fund Name	Month	Year to Date	Total Budget	% of Budget	Month	Year to Date	Total Budget	% of Budget	
100	General	558,067.74	2,204,103.18	7,970,522.57	27.65%	611,933.22	2,550,430.15	7,970,522.57	32.00%	
102	Non-Resident Lodging Tax	9,625.14	38,242.39	108,300.00	35.31%	7,500.00	32,775.00	107,100.00	30.60%	
105	Payroll	663.83	3,180.29	0.00	0.00%	271.36	-3,091.08	0.00	0.00%	
110	Solid Waste	90,063.17	361,505.97	1,050,683.23	34.41%	81,600.24	334,795.59	1,402,498.88	23.87%	
114	Heritage Hills Golf Course	154.15	3,847.17	190,000.00	2.02%	154.15	3,847.17	190,000.00	2.02%	
115	Parks and Recreation	154,368.77	865,295.85	2,060,949.08	41.99%	154,368.77	865,295.85	2,060,949.09	41.99%	
116	Park Sales Tax	100,491.92	445,698.97	1,302,100.00	34.23%	104,229.09	706,983.35	1,329,649.08	53.17%	
120	Airport	15,279.65	101,147.05	746,461.73	13.55%	50,607.41	145,542.61	746,461.73	19.50%	
125	Perpetual Care Cemetery Sales	0.00	0.00	20,000.00	0.00%	0.00	0.00	20,000.00	0.00%	
126	Perpetual Care Cemetery Investment	593.60	2,801.01	28,700.00	9.76%	0.00	0.00	6,000.00	0.00%	
140	Veterans Memorial Flag Project	650.62	1,887.08	5,250.00	35.94%	0.00	732.78	2,500.00	29.31%	
300	Utilities Collection	504,672.72	1,910,849.17	5,959,915.29	32.06%	407,408.54	1,811,141.36	5,929,915.29	30.54%	
301	Utilities Operation and Maintenance	261,986.11	1,131,855.66	4,537,171.70	24.95%	261,986.11	1,131,855.66	4,537,171.70	24.95%	
302	Utilities Replacement	4,083.33	16,333.32	49,000.00	33.33%	8,518.55	8,518.55	0.00	0.00%	
303	Utilities Operating Reserve	60,262.09	340,475.40	380,502.02	89.48%	23,563.77	120,506.83	820,317.31	14.69%	
304	Capital Improvement Trust	96,727.25	417,117.96	1,212,800.00	34.39%	78,820.05	251,112.53	2,210,281.50	11.36%	
307	Sugar Creek Lake Fund	133.27	782.53	2,500.00	31.30%	0.00	0.00	0.00	0.00%	
377	2004B SRF Bonds Debt Service	45,170.61	181,542.55	544,757.50	33.33%	37,898.57	151,921.96	480,325.00	31.63%	
378	2006A SRF Bonds Debt Service	39,181.40	157,941.55	473,606.25	33.35%	26,842.53	119,572.78	409,187.50	29.22%	
379	2004C Bond Debt Service	29,525.43	118,116.12	353,920.00	33.37%	25,756.20	104,422.28	322,700.00	32.36%	
380	2008A Bonds Debt Service	15,077.81	60,322.75	180,686.50	33.39%	0.00	37,605.54	164,760.45	22.82%	
400	911 Emergency Telephone	33,898.43	75,450.37	715,600.00	10.54%	41,115.39	241,653.09	701,712.75	34.44%	
406	Inmate Security Fund	63.96	326.69	1,400.00	23.34%	0.00	0.00	0.00	0.00%	
600	Transportation Trust	98,966.33	482,867.51	2,499,700.00	19.32%	674,007.15	776,778.96	2,699,025.00	28.78%	
601	Street Improvement	34,426.22	141,579.07	393,700.00	35.96%	26,101.32	81,864.99	359,625.00	22.76%	
903	Ameren MO Solar Rebates	0.00	416,130.00	0.00	0.00%	0.00	0.00	0.00	0.00%	
905	ICSC/Buxton Scholarship	8.21	38.59	0.00	0.00%	0.00	0.00	0.00	0.00%	
908	Railcar Preservation Fund	0.76	3.51	0.00	0.00%	0.00	0.00	0.00	0.00%	

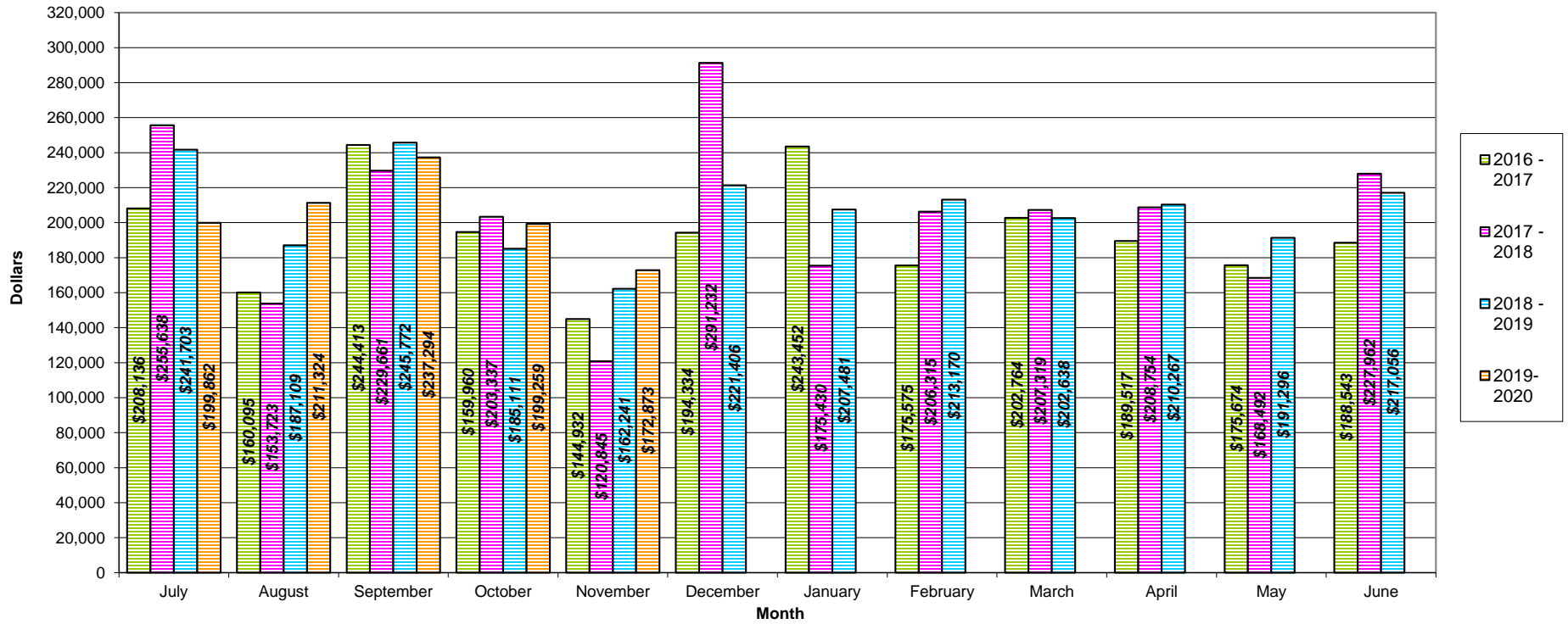
City of Moberly Budget Comparison Report - October 2019

		Percentage of Year Completed								33.33%
		Revenues				Expenditures				
Fund #	Fund Name	Month	Year to Date	Total Budget	% of Budget	Month	Year to Date	Total Budget	% of Budget	
909	Lucille Manor CDBG Reimbursement	2,137.56	8,698.48	25,525.20	34.08%	0.00	0.00	0.00	0.00%	
911	Downtown CID Sales Tax	3,465.90	19,514.64	62,760.00	31.09%	1,138.50	17,300.72	62,760.00	27.57%	
912	Downtown CID Property Tax	145.02	41,680.71	280,350.00	14.87%	0.00	19,843.83	280,350.00	7.08%	
995	Health Trust	118,945.79	481,948.83	0.00	0.00%	195,445.67	831,559.80	0.00	0.00%	
TOTALS		2,278,836.79	10,031,284.37	31,156,861.07	32.20%	2,819,266.59	10,342,970.30	32,813,812.85	31.52%	

**City of Moberly
One Percent (1%) General Fund Sales Tax Analysis**

	2016 - 2017				2017 - 2018				2018 - 2019				2019-2020			
			Prior year comparison				Prior year comparison				Prior year comparison				Prior year comparison	
	% of total	Amount	Monthly Change	YTD Change	% of total	Amount	Monthly Change	YTD Change	% of total	Amount	Monthly Change	YTD Change	% of total	Amount	Monthly Change	YTD Change
July	8.96%	\$208,136	-6.38%	-6.38%	10.44%	\$255,638	22.82%	22.82%	9.73%	\$241,703	-5.45%	-5.45%	19.58%	\$199,862	-17.31%	-17.31%
August	6.89%	\$160,095	8.19%	-0.56%	6.28%	\$153,723	-3.98%	11.17%	7.53%	\$187,109	21.72%	4.75%	20.71%	\$211,324	12.94%	-4.11%
September	10.53%	\$244,413	0.18%	-0.27%	9.38%	\$229,661	-6.04%	4.31%	9.89%	\$245,772	7.02%	5.57%	23.25%	\$237,294	-3.45%	-3.87%
October	8.38%	\$194,632	-5.34%	-1.54%	8.30%	\$203,337	4.47%	4.35%	7.45%	\$185,111	-8.96%	2.06%	19.52%	\$199,259	7.64%	-1.39%
November	6.24%	\$144,932	-8.77%	-2.71%	4.94%	\$120,845	-16.62%	1.15%	6.53%	\$162,241	34.26%	6.10%	16.94%	\$172,873	6.55%	-0.13%
December	8.37%	\$194,334	-11.82%	-4.39%	11.89%	\$291,232	49.86%	9.41%	8.91%	\$221,406	-23.98%	-0.88%	0.00%			
January	10.48%	\$243,452	32.26%	0.49%	7.16%	\$175,430	-27.94%	2.87%	8.35%	\$207,481	18.27%	1.47%	0.00%			
February	7.56%	\$175,575	-1.47%	0.27%	8.43%	\$206,315	17.51%	4.51%	8.58%	\$213,170	3.32%	1.70%	0.00%			
March	8.73%	\$202,764	-12.02%	-1.31%	8.47%	\$207,319	2.25%	4.25%	8.15%	\$202,638	-2.26%	1.25%	0.00%			
April	8.16%	\$189,517	-3.53%	-1.53%	8.53%	\$208,754	10.15%	4.82%	8.46%	\$210,267	0.72%	1.20%	0.00%			
May	7.57%	\$175,674	19.71%	-0.07%	6.88%	\$168,492	-4.09%	4.09%	7.70%	\$191,296	13.53%	2.14%	0.00%			
June	8.12%	\$188,543	-21.24%	-2.21%	9.31%	\$227,962	20.91%	5.45%	8.73%	\$217,056	-4.78%	1.49%	0.00%			
Total	100.00%	\$2,322,067			100.00%	\$2,448,705			100.00%	\$2,485,248			100.00%	\$1,020,612		

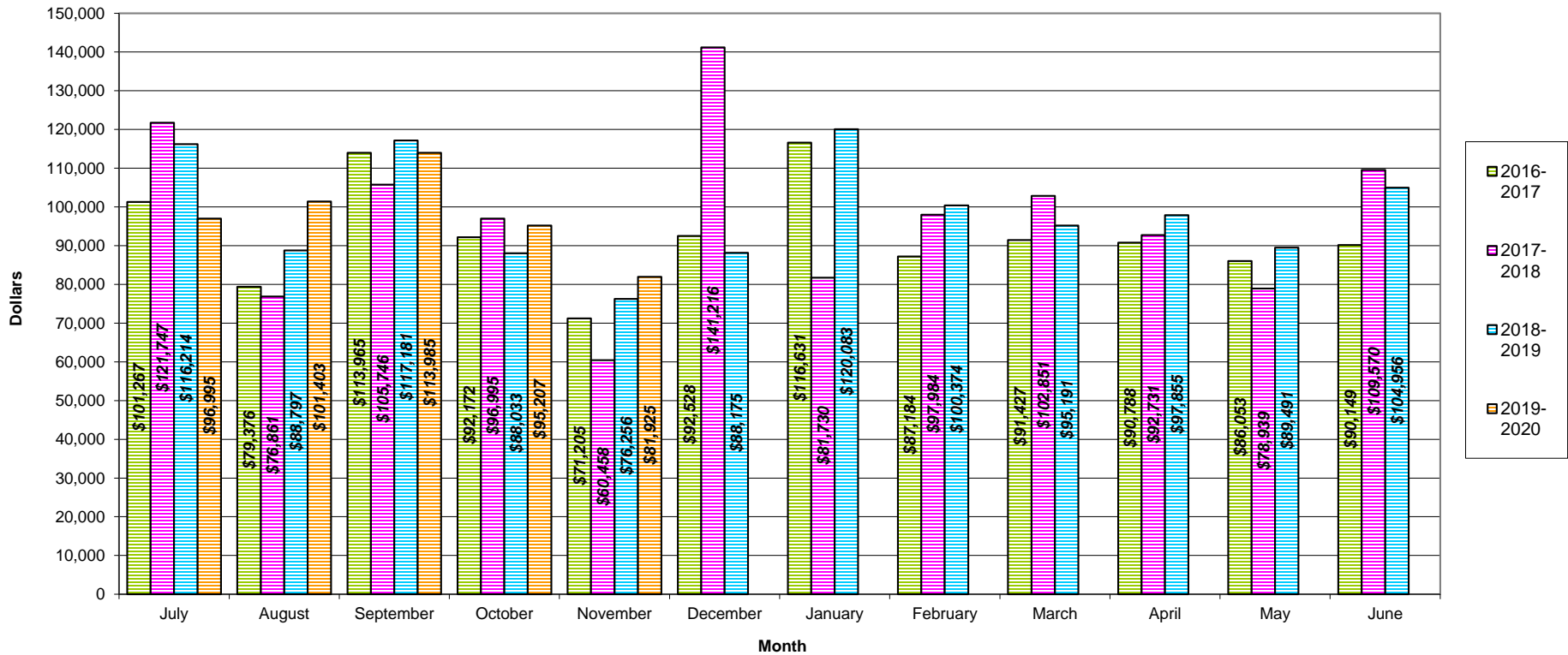
Annual Comparison by Month



**City of Moberly
One-Half Percent (1/2%) Parks Fund Sales Tax Analysis**

	2016-2017				2017-2018				2018-2019				2019-2020			
	% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison	
Monthly Change			YTD Change	Monthly Change			YTD Change	Monthly Change			YTD Change	Monthly Change			YTD Change	
July	9.10%	\$101,267	-6.50%	-6.50%	10.43%	\$121,747	20.22%	20.22%	9.83%	\$116,214	-4.54%	-4.54%	19.81%	\$96,995	-16.54%	-16.54%
August	7.13%	\$79,376	7.88%	-0.68%	6.59%	\$76,861	-3.17%	9.94%	7.51%	\$88,797	15.53%	3.22%	20.72%	\$101,403	14.20%	-3.23%
September	10.24%	\$113,965	-0.23%	-0.50%	9.06%	\$105,746	-7.21%	3.31%	9.91%	\$117,181	10.81%	5.86%	23.29%	\$113,985	-2.73%	-3.04%
October	8.28%	\$92,172	-5.62%	-1.77%	8.31%	\$96,995	5.23%	3.77%	7.44%	\$88,033	-9.24%	2.21%	19.45%	\$95,207	8.15%	-0.64%
November	6.40%	\$71,205	-9.69%	-3.09%	5.18%	\$60,458	-15.09%	0.83%	6.45%	\$76,256	26.13%	5.34%	16.74%	\$81,925	7.43%	0.62%
December	8.32%	\$92,528	-10.26%	-4.38%	12.10%	\$141,216	52.62%	9.54%	7.46%	\$88,175	-37.56%	-4.70%	0.00%			
January	10.48%	\$116,631	31.09%	0.37%	7.00%	\$81,730	-29.92%	2.64%	10.15%	\$120,083	46.93%	1.46%	0.00%			
February	7.84%	\$87,184	-1.52%	0.15%	8.40%	\$97,984	12.39%	3.77%	8.49%	\$100,374	2.44%	1.58%	0.00%			
March	8.22%	\$91,427	-13.48%	-1.53%	8.81%	\$102,851	12.50%	4.71%	8.05%	\$95,191	-7.45%	0.53%	0.00%			
April	8.16%	\$90,788	-1.86%	-1.56%	7.95%	\$92,731	2.14%	4.46%	8.27%	\$97,855	5.53%	1.01%	0.00%			
May	7.73%	\$86,053	18.21%	-0.16%	6.77%	\$78,939	-8.27%	3.39%	7.57%	\$89,491	13.37%	1.93%	0.00%			
June	8.10%	\$90,149	-19.69%	-2.08%	9.39%	\$109,570	21.54%	4.86%	8.87%	\$104,956	-4.21%	1.35%	0.00%			
Total	100.00%	\$1,112,745			100.00%	\$1,166,827			100.00%	\$1,182,605			100.00%	\$489,515		

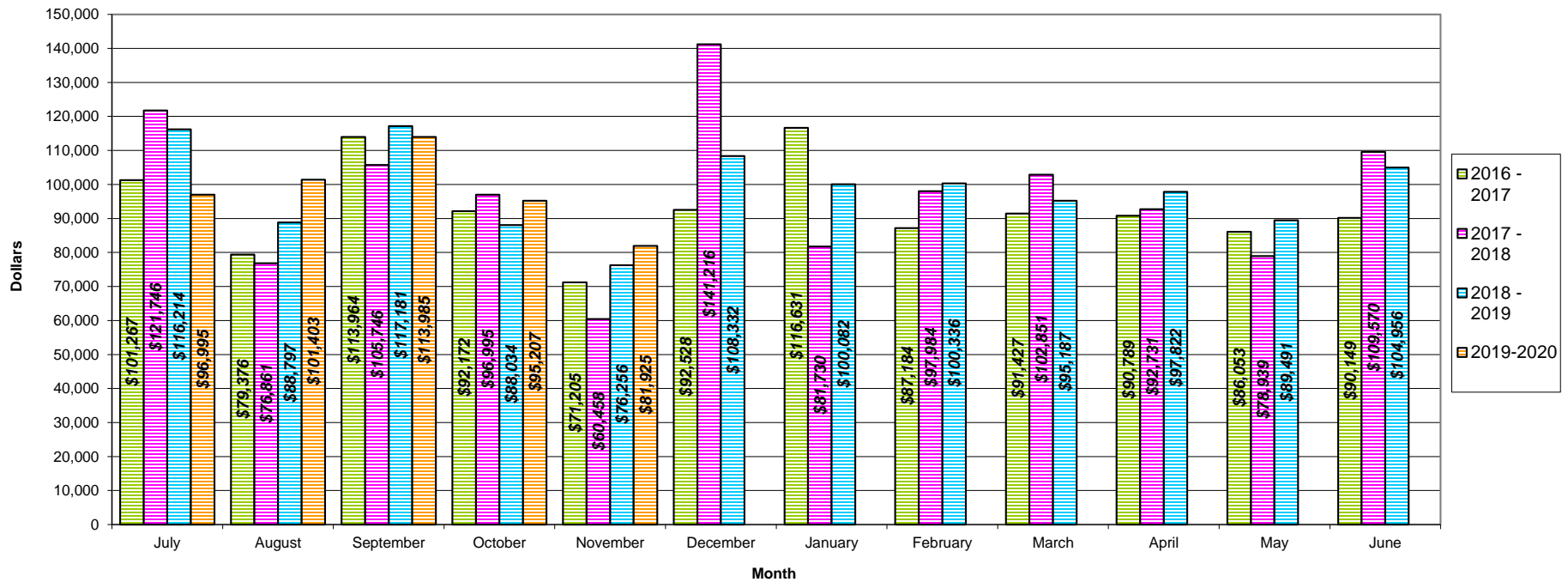
Annual Comparison by Month



**City of Moberly
One-Half Percent (1/2%) Capital Improvement Fund Sales Tax Analysis**

	2016 - 2017				2017 - 2018				2018 - 2019				2019-2020			
	% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison	
Monthly Change			YTD Change	Monthly Change			YTD Change	Monthly Change			YTD Change	Monthly Change			YTD Change	
July	9.10%	\$101,267	-6.50%	-6.50%	10.43%	\$121,746	20.22%	20.22%	9.83%	\$116,214	-4.54%	-4.54%	19.81%	\$96,995	-16.54%	-16.54%
August	7.13%	\$79,376	7.88%	-0.68%	6.59%	\$76,861	-3.17%	9.94%	7.51%	\$88,797	15.53%	3.22%	20.72%	\$101,403	14.20%	-3.23%
September	10.24%	\$113,964	-0.23%	-0.50%	9.06%	\$105,746	-7.21%	3.31%	9.91%	\$117,181	10.81%	5.86%	23.29%	\$113,985	-2.73%	-3.04%
October	8.28%	\$92,172	-5.62%	-1.77%	8.31%	\$96,995	5.23%	3.77%	7.44%	\$88,034	-9.24%	2.21%	19.45%	\$95,207	8.15%	-0.64%
November	6.40%	\$71,205	-9.69%	-3.09%	5.18%	\$60,458	-15.09%	0.83%	6.45%	\$76,256	26.13%	5.34%	16.74%	\$81,925	7.43%	0.62%
December	8.32%	\$92,528	-10.26%	-4.38%	12.10%	\$141,216	52.62%	9.54%	9.16%	\$108,332	-23.29%	-1.36%	0.00%			
January	10.48%	\$116,631	31.09%	0.37%	7.00%	\$81,730	-29.92%	2.64%	8.46%	\$100,082	22.45%	1.48%	0.00%			
February	7.84%	\$87,184	-1.54%	0.15%	8.40%	\$97,984	12.39%	3.77%	8.48%	\$100,336	2.40%	1.60%	0.00%			
March	8.22%	\$91,427	-13.48%	-1.53%	8.81%	\$102,851	12.50%	4.71%	8.05%	\$95,187	-7.45%	0.55%	0.00%			
April	8.16%	\$90,789	-1.86%	-1.56%	7.95%	\$92,731	2.14%	4.46%	8.27%	\$97,822	5.49%	1.01%	0.00%			
May	7.73%	\$86,053	18.21%	-0.16%	6.77%	\$78,939	-8.27%	3.39%	7.57%	\$89,491	13.37%	1.94%	0.00%			
June	8.10%	\$90,149	-19.69%	-2.09%	9.39%	\$109,570	21.54%	4.86%	8.87%	\$104,956	-4.21%	1.36%	0.00%			
Total	100.00%	\$1,112,745			100.00%	\$1,166,827			100.00%	\$1,182,688			100.00%	\$489,515		

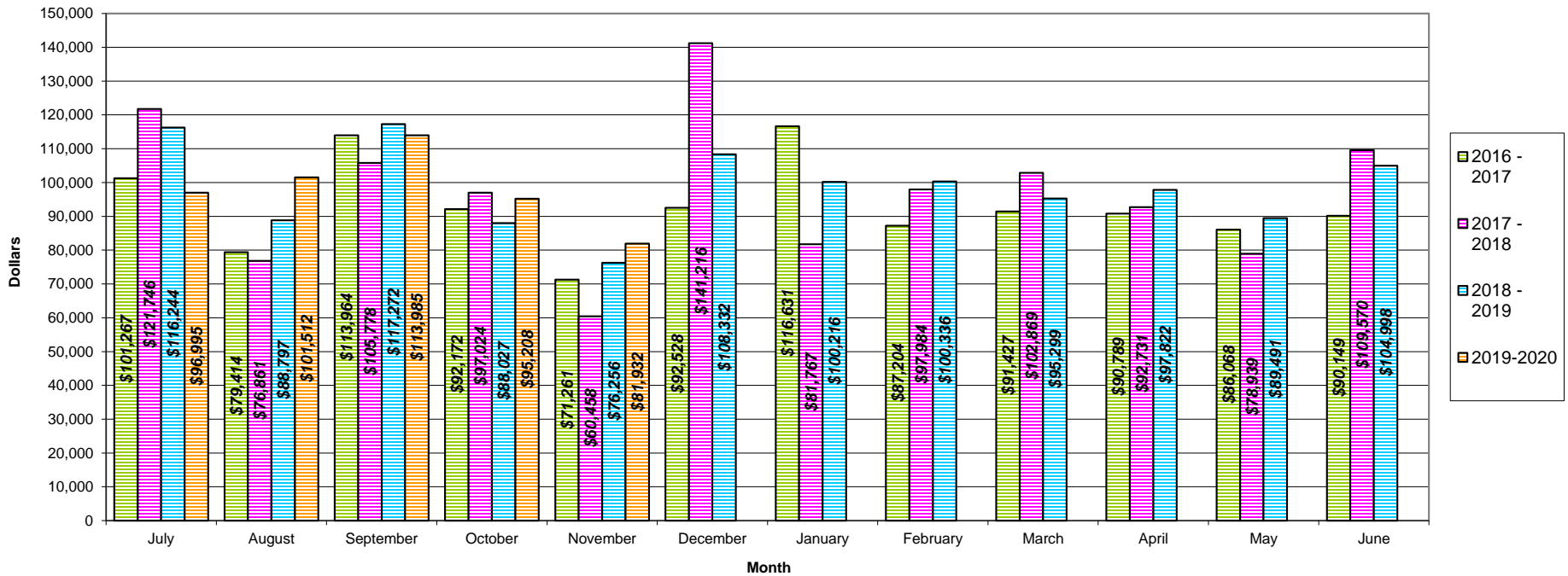
Annual Comparison by Month



**City of Moberly
One-Half Percent (1/2%) Transportation Trust Fund Sales Tax Analysis**

	2016 - 2017				2017 - 2018				2018 - 2019				2019-2020			
	% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison	
			Monthly Change	YTD Change			Monthly Change	YTD Change			Monthly Change	YTD Change			Monthly Change	YTD Change
July	9.10%	\$101,267	-6.50%	-6.50%	10.43%	\$121,746	20.22%	20.22%	9.83%	\$116,244	-4.52%	-4.52%	19.81%	\$96,995	-16.56%	-16.56%
August	7.14%	\$79,414	7.89%	-0.67%	6.59%	\$76,861	-3.21%	9.92%	7.51%	\$88,797	15.53%	3.24%	20.73%	\$101,512	14.32%	-3.19%
September	10.24%	\$113,964	-0.23%	-0.50%	9.06%	\$105,778	-7.18%	3.31%	9.91%	\$117,272	10.87%	5.89%	23.28%	\$113,985	-2.80%	-3.05%
October	8.28%	\$92,172	-5.62%	-1.77%	8.31%	\$97,024	5.26%	3.77%	7.44%	\$88,027	-9.27%	2.22%	19.44%	\$95,208	8.16%	-0.64%
November	6.40%	\$71,261	-9.62%	-3.08%	5.18%	\$60,458	-15.16%	0.83%	6.45%	\$76,256	26.13%	5.35%	16.73%	\$81,932	7.44%	0.62%
December	8.31%	\$92,528	-10.36%	-4.38%	12.10%	\$141,216	52.62%	9.53%	9.16%	\$108,332	-23.29%	-1.35%	0.00%			
January	10.48%	\$116,631	31.09%	0.36%	7.01%	\$81,767	-29.89%	2.64%	8.47%	\$100,216	22.56%	1.50%	0.00%			
February	7.84%	\$87,204	-1.50%	0.14%	8.40%	\$97,984	12.36%	3.76%	8.48%	\$100,336	2.40%	1.62%	0.00%			
March	8.22%	\$91,427	-13.48%	-1.53%	8.82%	\$102,869	12.52%	4.71%	8.06%	\$95,299	-7.36%	0.57%	0.00%			
April	8.16%	\$90,789	-1.86%	-1.56%	7.95%	\$92,731	2.14%	4.46%	8.27%	\$97,822	5.49%	1.04%	0.00%			
May	7.73%	\$86,068	18.18%	-0.16%	6.76%	\$78,939	-8.28%	3.39%	7.56%	\$89,491	13.37%	1.96%	0.00%			
June	8.10%	\$90,149	-19.69%	-2.09%	9.39%	\$109,570	21.54%	4.86%	8.87%	\$104,998	-4.17%	1.38%	0.00%			
Total	100.00%	\$1,112,873			100.00%	\$1,166,944			100.00%	\$1,183,089			100.00%	\$489,632		

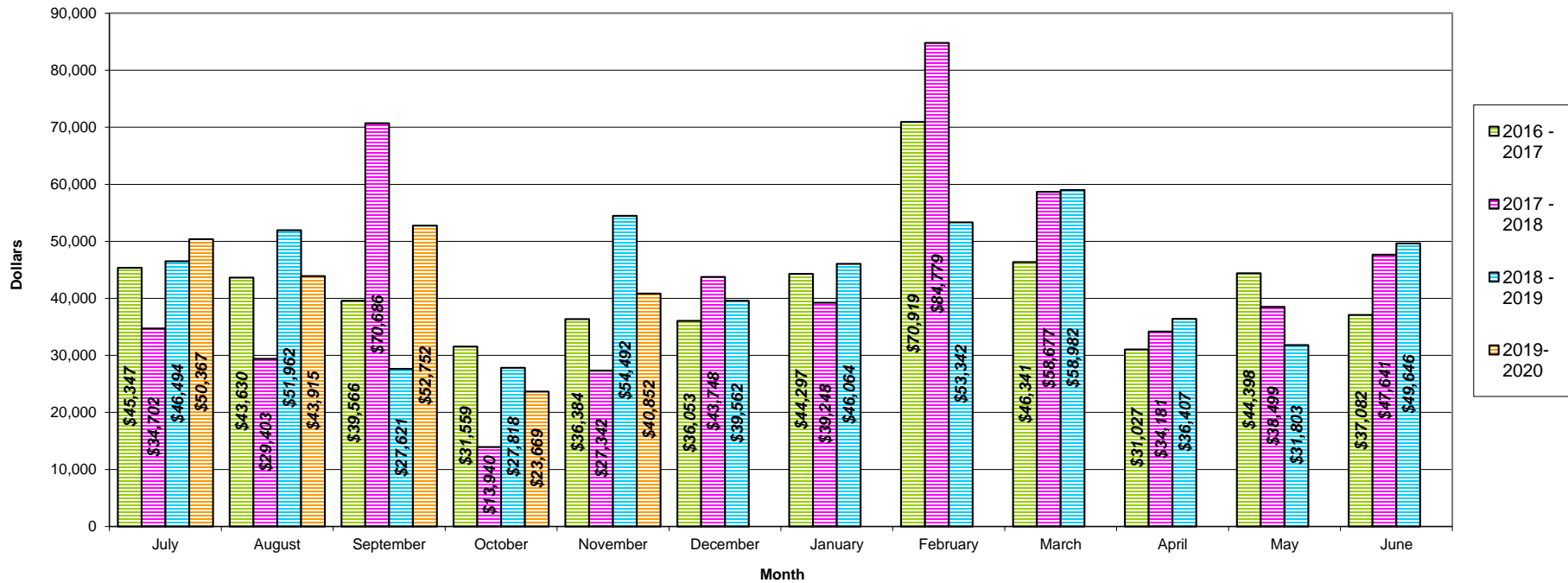
Annual Comparison by Month



**City of Moberly
Two & One-Half Percent (2-1/2%) Use Tax Analysis**

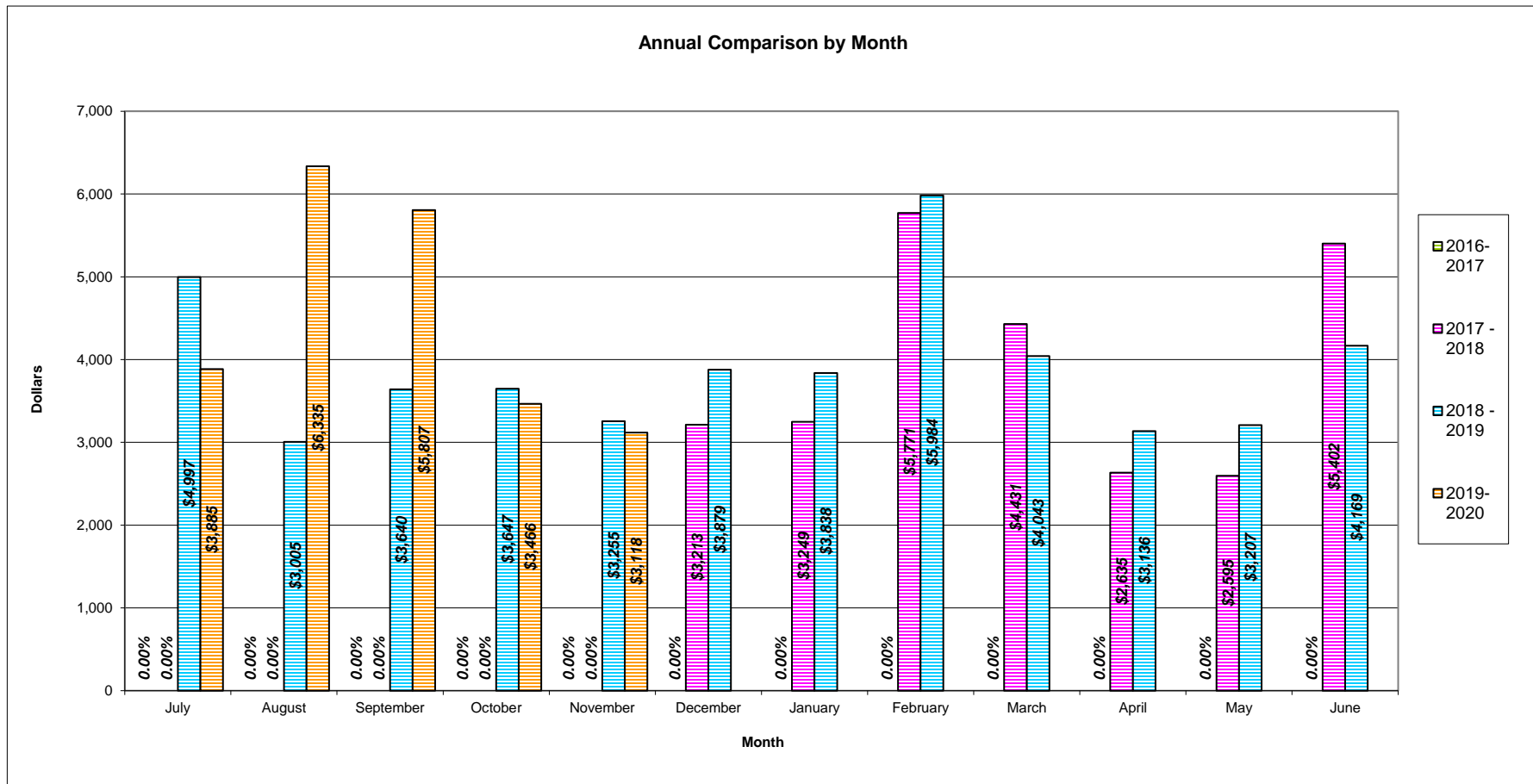
	2016 - 2017				2017 - 2018				2018 - 2019				2019-2020			
	% of total	Amount	Prior year comparison		% of total	Amount	Monthly Change	YTD Change	% of total	Amount	Monthly Change	YTD Change	% of total	Amount	Monthly Change	YTD Change
July	8.95%	\$45,347	8.05%	8.05%	6.64%	\$34,702	-23.47%	-23.47%	8.87%	\$46,494	33.98%	33.98%	23.81%	\$50,367	8.33%	8.33%
August	8.61%	\$43,630	41.85%	22.34%	5.62%	\$29,403	-32.61%	-27.95%	9.91%	\$51,962	76.73%	53.59%	20.76%	\$43,915	-15.49%	-4.24%
September	7.81%	\$39,566	-6.23%	11.85%	13.52%	\$70,686	78.65%	4.86%	5.27%	\$27,621	-60.92%	-6.46%	24.94%	\$52,752	90.99%	16.62%
October	6.23%	\$31,559	-13.98%	5.60%	2.67%	\$13,940	-55.83%	-7.10%	5.31%	\$27,818	99.55%	3.47%	11.19%	\$23,669	-14.91%	10.92%
November	7.18%	\$36,384	-19.45%	-0.15%	5.23%	\$27,342	-24.85%	-10.39%	10.40%	\$54,492	99.30%	18.35%	19.31%	\$40,852	-25.03%	1.52%
December	7.12%	\$36,053	-67.19%	-24.17%	8.37%	\$43,748	21.34%	-5.47%	7.55%	\$39,562	-9.57%	12.80%	0.00%			
January	8.74%	\$44,297	-34.66%	-26.07%	7.51%	\$39,248	-11.40%	-6.42%	8.79%	\$46,064	17.37%	13.49%	0.00%			
February	14.00%	\$70,919	21.73%	-19.63%	16.21%	\$84,779	19.54%	-1.12%	10.18%	\$53,342	-37.08%	1.02%	0.00%			
March	9.15%	\$46,341	-68.04%	-31.78%	11.22%	\$58,677	26.62%	2.14%	11.25%	\$58,982	0.52%	0.95%	0.00%			
April	6.12%	\$31,027	16.49%	-29.65%	6.54%	\$34,181	10.17%	2.72%	6.95%	\$36,407	6.51%	1.38%	0.00%			
May	8.76%	\$44,398	24.73%	-26.63%	7.36%	\$38,499	-13.29%	1.21%	6.07%	\$31,803	-17.39%	-0.14%	0.00%			
June	7.32%	\$37,082	-41.14%	-27.93%	9.11%	\$47,641	28.48%	3.21%	9.47%	\$49,646	4.21%	0.26%	0.00%			
Total	100.00%	\$506,603			100.00%	\$522,845			100.00%	\$524,193			100.00%	\$211,555		

Annual Comparison by Month



City of Moberly
One Percent (1%) Downtown Community Improvement District Sales & Use Tax Analysis

	2016-2017				2017 - 2018				2018 - 2019				2019-2020			
	% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison		% of total	Amount	Prior year comparison	
			Monthly Change	YTD Change			Monthly Change	YTD Change			Monthly Change	YTD Change			Monthly Change	YTD Change
July	NA	NA	NA	NA	NA	NA	NA	NA	10.68%	\$4,997	NA	NA	17.18%	\$3,885	-22.25%	-22.25%
August	NA	NA	NA	NA	NA	NA	NA	NA	6.42%	\$3,005	NA	NA	28.02%	\$6,335	110.82%	27.72%
September	NA	NA	NA	NA	NA	NA	NA	NA	7.78%	\$3,640	NA	NA	25.68%	\$5,807	59.53%	37.67%
October	NA	NA	NA	NA	NA	NA	NA	NA	7.79%	\$3,647	NA	NA	15.33%	\$3,466	-4.97%	27.50%
November	NA	NA	NA	NA	NA	NA	NA	NA	6.96%	\$3,255	NA	NA	13.79%	\$3,118	-4.21%	21.93%
December	NA	NA	NA	NA	11.77%	\$3,213	NA	NA	8.29%	\$3,879	20.72%	20.72%	0.00%			
January	NA	NA	NA	NA	11.90%	\$3,249	NA	NA	8.20%	\$3,838	18.14%	19.42%	0.00%			
February	NA	NA	NA	NA	21.14%	\$5,771	NA	NA	12.79%	\$5,984	3.69%	12.00%	0.00%			
March	NA	NA	NA	NA	16.23%	\$4,431	NA	NA	8.64%	\$4,043	-8.74%	6.48%	0.00%			
April	NA	NA	NA	NA	9.65%	\$2,635	NA	NA	6.70%	\$3,136	19.03%	8.20%	0.00%			
May	NA	NA	NA	NA	9.51%	\$2,595	NA	NA	6.85%	\$3,207	23.58%	10.02%	0.00%			
June	NA	NA	NA	NA	19.79%	\$5,402	NA	NA	8.91%	\$4,169	-22.83%	3.52%	0.00%			
Total					100.00%	\$27,296			100.00%	\$46,801			100.00%	\$22,612		



**City of Moberly
Health Trust Contribution Calculation
October 2019**

Health Trust Fund target balance	1,000,000.00
Less invested funds	0.00
Adjusted Health Trust Fund target balance	1,000,000.00
Health Trust Fund cash balance @ 10/31/19	161,101.66
Amount needed to return balance to adjusted target balance	838,898.34
City contribution amount	96,854.17

(the lesser of the amount needed to return the fund balance to the adjusted target balance or 1/12 of the total annual budgeted health contributions)

Budget Comparison	
Total 2019-2020 budgeted health insurance cost	\$ 1,162,715.11
Total YTD health insurance contributions	\$ 387,532.95
Total YTD budgeted health insurance expense	\$ 387,532.95
% of 2019-2020 budget expended	33.33%
% of fiscal year passed	33.33%
Amount under (over) budget YTD	\$ -
Percentage under (over) budget YTD	0.00%

**City of Moberly Health Plan Trust
Comparative Profit & Loss Statement
October 2019**

<u>Income</u>	<u>July-Oct. 2019</u>	<u>July-Oct. 2018</u>	<u>\$ Change</u>	<u>% Change</u>
4900 Miscellaneous	4,802.52	414.92	4,387.60	1057.46%
4901 Interest Income	11,837.77	4,553.02	7,284.75	160.00%
4950 Employer Contributions	398,623.62	369,849.13	28,774.49	7.78%
4951 Employee Contributions	65,027.94	70,321.85	(5,293.91)	-7.53%
4952 Employee Cobra Payments	988.97	0.00	988.97	100.00%
4953 Reinsurance Refunds	<u>668.01</u>	<u>0.00</u>	<u>668.01</u>	<u>100.00%</u>
Total Income	481,948.83	445,138.92	36,809.91	8.27%
 <u>Expenditures</u>				
5415 Other Professional Services	0.00	800.00	(800.00)	-100.00%
5806 Miscellaneous	0.00	0.00	0.00	100.00%
5817 Bank Fees	286.88	412.52	(125.64)	-30.46%
5850 Health Claims Paid	574,425.26	261,302.52	313,122.74	119.83%
5851 Pharmaceuticals	112,301.61	90,592.55	21,709.06	23.96%
5852 Reinsurance Premiums	102,345.21	90,464.07	11,881.14	13.13%
5853 Life Insurance Premiums	11,011.87	10,525.50	486.37	4.62%
5854 Medical Claims Admin Fees	6,360.94	6,323.96	36.98	0.58%
5855 Dental Claims Admin Fees	1,807.00	1,748.50	58.50	3.35%
5856 PPO Network Admin Fees	0.00	0.00	0.00	100.00%
5857 Dental Claims Paid	<u>24,531.44</u>	<u>19,067.58</u>	<u>5,463.86</u>	<u>28.66%</u>
Total Expenditures	<u>833,070.21</u>	<u>481,237.20</u>	<u>351,833.01</u>	<u>73.11%</u>
 Net Income (Loss)	 <u>(351,121.38)</u>	 <u>(36,098.28)</u>	 <u>(315,023.10)</u>	 <u>872.68%</u>

**City of Moberly Health Plan Trust
Comparative Balance Sheet
October 31, 2019**

<u>ASSETS</u>	<u>Oct. 31, 2019</u>	<u>Oct. 31, 2018</u>	<u>\$ Change</u>	<u>% Change</u>
Current Assets				
1000 Cash	161,101.66	133,065.43	28,036.23	21.07%
Total Current Assets	161,101.66	133,065.43	28,036.23	21.07%
Other Assets				
1300 Investments	0.00	400,000.00	(400,000.00)	-100.00%
Total Other Assets	0.00	400,000.00	(400,000.00)	-100.00%
TOTAL ASSETS	<u>161,101.66</u>	<u>533,065.43</u>	<u>(371,963.77)</u>	<u>-69.78%</u>
 <u>LIABILITIES & EQUITY</u>				
Equity				
3000 Unreserved Fund Balance	512,223.04	569,163.71	(56,940.67)	-10.00%
Net Income (Loss)	(351,121.38)	(36,098.28)	(315,023.10)	872.68%
Total Equity	161,101.66	533,065.43	(371,963.77)	-69.78%
TOTAL LIABILITIES & EQUITY	<u>161,101.66</u>	<u>533,065.43</u>	<u>(371,963.77)</u>	<u>-69.78%</u>

11/01/19
10:05

Moberly Police Department
Total CAD Calls Received, by Nature of Call

Page: 343
1

Nature of Call	Total Calls Received	% of Total
Abandoned Vehicle	7	0.90
Accident/Motor Vehicle	37	4.76
Alarm Call	31	3.99
Animal Bite	1	0.13
Animal Complaint	33	4.25
Assault	15	1.93
Assist Other Agency	40	5.15
Assist Police	1	0.13
Assist Public/Employee	57	7.34
Building Check	29	3.73
Burglary	3	0.39
Civil Matter	1	0.13
Damage Property	21	2.70
Dangerous Drug	5	0.64
Death Investigation	1	0.13
Document Delivery/Pickup	1	0.13
Domestic Abuse	4	0.51
DWI	1	0.13
E911 Check	2	0.26
Field Contact	20	2.57
Fire Call	1	0.13
Forgery	1	0.13
Found Property/Contraband	4	0.51
Fraud	7	0.90
Funeral Escort	4	0.51
Harassment	10	1.29
Health Safety	2	0.26
Keeping the Peace	9	1.16
Medical Assist\RCAD	4	0.51
Parking Violation	10	1.29
Peace Disturbance	60	7.72
Search Warrant	1	0.13
Sex Offenses	4	0.51
Special Assignment	9	1.16
Stalking	1	0.13
Stealing	46	5.92
Suspicious Activity	62	7.98
Suspicious Person	11	1.42
Suspicious Vehicle	12	1.54
Traffic Complaint	127	16.34
Trespass/Refusing to Leave	9	1.16
Warrant Arrest	19	2.45
Try to Contact/Well-Being	54	6.95

Total Calls:	777	

Report Includes:

All dates between `00:00:01 10/01/19` and `23:59:59 10/31/19`
All nature of incidents
All cities matching `MOB`
All types
All priorities
All agencies matching `1`

*** End of Report \SpillmanServer\app\tmp\reportTmp_aspilman\r



City of

Police Department

Troy Link
Chief of Police
264th Session FBI Academy

300 N Clark Street
Moberly, MO 65270
Phone: 660-263-0346
Fax: 660-263-8540

**Division of Criminal Investigation
Monthly Report
October 2019**

1. Warrant Arrest (P&P): Suspect: EM, W/M, 45 yoa; Victim: State of Missouri. Reports sent to RCJC.
2. Warrant Arrest (FTA: DWR): Suspect: EM, W/M, 45 yoa; Victim: State of Missouri. Reports sent to RCJC.
3. Terrorist Threat-1st Deg: Suspect: EF, W/M, 54 yoa; Victim: MRMC. Reports sent to RCPA. Stalking- 1st Deg: Suspect: EF, W/M, 54 yoa; Victim: JB, W/F, 54 yoa. Repots sent to RCPA.
4. Burglary 2nd: Suspect; ME, 18 yoa, B/M, Victim: KB, 53 yo, B/M, Disposition: To RCPA
5. Stealing a Firearm: Suspect: Suspect; ME, 18 yoa, B/M, Victim: KB, 53 yo, B/M, Disposition: To RCPA
6. Stat Rape 1st: Suspect: BV, 35 yoa, W/M, Victim: AS, 14 yoa, W/F, Disposition: Unfounded
7. Felon in Possession of a Firearm: LH, 29 yoa, W/M, Victim: State of Missouri, Disposition: To RCPA
8. Possession of a Controlled Substance: Suspect: RO, 61 yoa, W/F, Victim: State of Missouri, Disposition: To RCPA
9. Possession of a Controlled Substance: Suspect: AS, 38 yoa, W/F, Victim: State of Missouri, Disposition: To RCPA
10. Stealing: CD, 30 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
11. Stealing: CD, 30 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
12. Stealing: CD, 30 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
13. Stealing: CD, 30 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
14. Stealing: LH, 29 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
15. Stealing: LH, 29 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
16. Stealing: LH, 29 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA
17. Stealing: LH, 29 yoa, W/M, Victim: Fortune Wireless, Disposition: To RCPA

18. Arrest on Warrant (Fail to Register as Sex Offender): LM, 69 yoa, W/M, Victim: State of Missouri, Disposition: Warrant Returned to RCSO
19. Arrest on Warrant (Fail to Appear): RB, 19, W/M, Victim: State of Missouri, Disposition: Warrant Returned to RCSO
20. Possession of Drug Paraphernalia: RB, 19, W/M, Victim: City of Moberly , Disposition: To MPA
21. Fail to Display Valid Plates: RB, 19, W/M, Victim: City of Moberly, Disposition: To MPA
22. Fail to Maintain Financial Responsibility: RB, 19, W/M, Victim: City of Moberly, Disposition: To MPA
23. Driving While Revoked 1st: DT, 57 yoa, W/F, Victim: City of Moberly, Disposition: To MPA
24. Failure to Register as a Sex Offender: LM, 69 yoa, W/M, Victim: State of Missouri, Disposition: To RCPA
25. Sex Offender Halloween Restriction Violation: LM, 69 yoa, W/M, Victim: State of Missouri, Disposition: To RCPA
26. Failure to Register as a Sex Offender: SE, 42 yoa, W/M, Victim: State of Missouri, Disposition: To RCPA
27. Sex Offender Halloween Restriction Violation: SE, 42 yoa, W/M, Victim: State of Missouri, Disposition: To RCPA
28. Parole Violation Warrant: OK, 30 yoa, W/M, Victim: State of Missouri, Disposition: Warrant returned to RCSO
29. Stealing; Suspect LM 32 yo W/M, Victim: MS 33yo W/F, Disposition: To RCPA
30. Sex Offender Violation; Suspect LM 69yo W/M, Victim: State of Missouri, Disposition: To RCPA
31. Sex Offender Violation; Suspect WM 62 yo W/M, Victim: State of Missouri, Disposition: To RCPA
32. Sexual Misconduct; Suspect JD 51 yo W/M, Victim: JR 26 yo W/F, Disposition: Unfounded

Cases Cleared.....	32
Interviews.....	139
Interrogations.....	4
Reports Written.....	106

Special Assignments

Monthly Report

- Spoke with DFS about ongoing sexual abuse investigation.
- Spoke with RCSO deputy about stealing investigation.
- Assisted with interview of applicant.
- Spoke with possible witness in sex abuse investigation.
- Assisted with interviews of applicants.
- Assisted Task Force with search warrant.



City of

Police Department

Troy Link
Chief of Police
264th Session FBI Academy

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Attended meeting with Attorney General's Office reference murder case.
Assisted with executing search warrant reference stolen property investigation.
Completed MSHP Laboratory Analysis Request form.
Assisted patrol with person making threats to MRMC staff.
Contacted MIAC and T-Mobile for ping of suspect's phone.
Assisted with recovering stolen property from residence in Moberly.
Follow up investigation for death investigation.
Spoke with attorney from Health & Senior Services about an upcoming revocation hearing.
Attended two forensic interviews in Columbia.
Assisted with warrant arrest for Failure to Register as a Sex Offender.
Assisted with disturbance at Break Time on Hwy 24.
MULES recertification training.
Released stolen property back to owner.
Assisted with K9 search at Moberly High School.
Assisted with K9 search at Moberly Middle School.
Attended Missing in Missouri training for two days in St Charles.
Assisted with the Drug Take Back at the police department.
Assisted Patrol with attempting to locate a wanted subject.
Interviewed juvenile witnesses in regards to location of stolen property.
Court in Huntsville.
MIRMA Training- Sexual Harassment in the Workplace.
Attended Supervisor's Meeting.
Interviewed suspect in reference to stolen gun
Arrested and transported subject for burglary and stealing a firearm
Interviewed witness in stolen firearm case
Assisted patrol on traffic stop
Contacted MIAC to develop photo line up
Showed witness photo lineup for stolen firearm case
Interviewed suspect for felon in possession of a firearm and receiving stolen property
Responded to address to attempt to locate suspects/warrant arrest
Located stolen trailer during search of residence. Secured trailer for search warrant of its contents

Completed affidavit for search warrant and submitted to courts.
Assisted NOMO with a narcotics search warrant
Executed search warrant on stolen trailer
Interviewed witness for stolen trailer
Interviewed suspect for stolen trailer at Monroe County Jail
Watched interviews and typed reports
Recovered stolen property
Took new recruit to LEON's for uniforms and gear
Attended Major Case Squad Training
Conducted surveillance on residence believed to be in possession of stolen firearms and/or suspects
Arrested subject on outstanding arrest warrant.
Conducted field contact on vehicle leaving residence known for criminal activity
Attempted contact with subject for outstanding warrant
Call out to assist NOMO on narcotics buy.
Assisted patrol in apprehending fugitive
Field contact on wanted subject from investigation
Reviewed video and ID'd suspect in stolen property case
Attempted contact with parole violator/suspect in stolen firearm case
Attended court
Traffic stop with warning
Defensive tactics training
Traffic Stop training
Traffic stop with DWR summons and consent search
Traffic stop with warning and consent search
Returned property to owner
Conducted sex offender compliance checks/Halloween restriction checks
Observed subject with active parole warrant and made arrest
Icloud SW info collected
Monroe County DFS contact in reference sex assault
Background investigation
Suicide investigation
Photographs of body
Photographs of vehicle
Turned juvenile over to DFS/JO
Contacted subject for written statement
Collected video for stealing case
Collected video for stealing case
Collected video for stealing case
PC for stealing credit device
PC for Sex Offender violation
Field Contact in reference to possibly stolen property
Forensic Interview conducted at the Rainbow House
Interview Victim with sexual misconduct victim
Recanted Interview by sexual misconduct victim
Interview with sexual misconduct victim's mother



City of

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Contact with victims grandmother
Interview with burglary witness
Search of building
Search area for burglary suspect
SO violation
Conducted Halloween SO compliance check
Conducted Halloween SO compliance check
Conducted Halloween SO compliance check
Conducted Halloween SO compliance check
Forensic Interview at Rainbow House
Forensic Interview at Rainbow House

Recovered Property

- 1) Stolen / Black Conrail Flat Bed Trailer / \$4,000.00
- 2) Stolen / (3) Steel anchors / \$9,000.00
- 3) Stolen / Ratchet Straps / \$100.00

Total \$13,100.00

Respectfully Submitted,

Tracey Whearty
Commander

**Moberly Fire Department
October Monthly Report
2019**



City of Moberly Fire Department

Emergency Dial 911

Station #1 660-269-8705 EXT 2032

Fax# 660-263-0596

E-mail galbert@moberlyfd.com

Station #2 660-263-4121

310 N. Clark

Moberly, MO 65270-1520

Fire Chief

George Albert

To: Mayor and City Council
From: George Albert, Fire Chief
Date: November 11, 2019
Re: October 2019 Monthly Council Report:

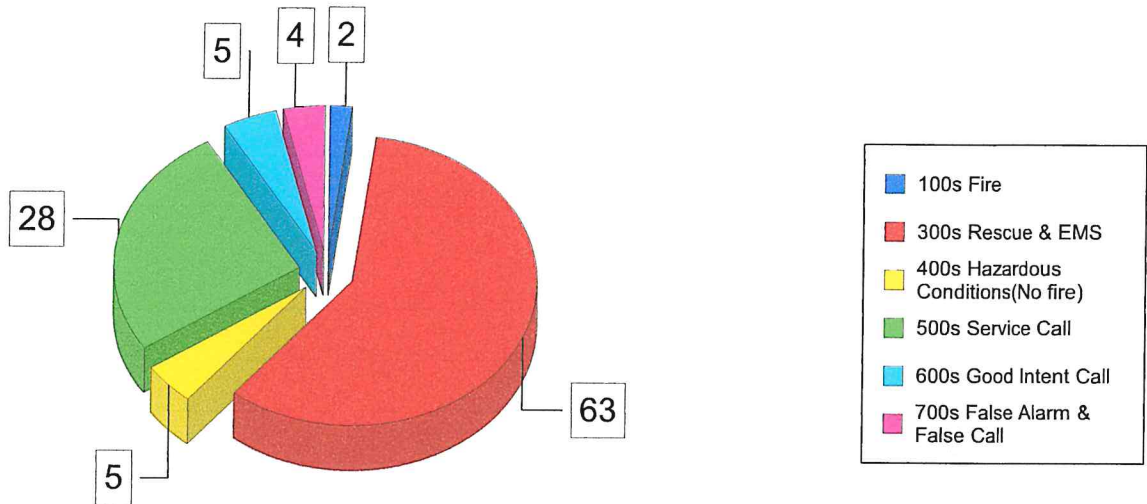
- Last month on October 28th we hired Andrew Lane to replace Ryan Petershiem. After two weeks of orientation Firefighter Lane will be placed on B Shift.
- We continue to have mechanical work completed on the tower truck and Engine 2. We are still waiting for the water tank on the tower and Engine 2 needs a new tire (under warranty) and possible radiator work.
- We are looking for replacements of 12 SCBA bottles that have expired. All Firefighters have been fit tested.
- The Moberly Fire Department responded to a 107 incidents (24 different types of service to the community). 2 fires, 8 lift assist, 47 EMS, 15 Gas Appliance and CFO Inspections, and 35 other types.
- The Department completed 714 hours of training on Health and Wellness, Search and Rescue, Pump Operator Training, District study, Building Construction, and Prevention and Education.
- Emergency Management: Participated in Pipeline Exercises, entered EMPG third quarter report, completed hazmat training, attended LEPC and RHSOC meetings, completed NIMS training, and participated in Career day,
- Fire Department Community Service involvement: We completed Fire Prevention and Education week at all of the school including Fire Drills, 1st responders for Moberly football games, held at Cardinal Health and Assisted Living Extinguisher training, participated Trunk and treats events, Wal-Mart DC Public safety event, Moberly Chamber Career day, and monthly siren testing.
- Chief Albert attended the 24/63 meeting, participated in the County wide building construction class, served lunch at South Park, and participated in live fire training in Ferguson and Cole County.

Incident Reports By Incident Type, Summary

Page 1 of 1

Incident Type	Total Incidents:
113 Cooking fire, confined to container	2
3112 Lift Assistance	8
3113 Standby, No care provided	3
321 EMS call, excluding vehicle accident with injury	47
322 Vehicle accident with injuries	2
324 Motor vehicle accident with no injuries	1
381 Rescue or EMS standby	2
412 Gas leak (natural gas or LPG)	3
442 Overheated motor	1
443 Light ballast breakdown	1
5001 Gas Appliance Inspection	13
5005 CFO Inspection	2
522 Water or steam leak	2
5311 Report of odor with nothing found	2
551 Assist police or other governmental agency	2
553 Public service	2
554 Assist invalid	4
561 Unauthorized burning	1
611 Dispatched & canceled en route	3
651 Smoke scare, odor of smoke	1
671 Hazmat release investigation w/ no hazmat	1
7401 Unintentional alarm transmission medical	2
743 Smoke detector activation, no fire - unintentional	1
745 Alarm system sounded, no fire - unintentional	1
Total Number of Incidents:	107
Total Number of Incident Types:	24

Print Date: 11/11/2019



Graphed Items are sorted by Incident Type

Type Of Incident:

Total Of Incidents:

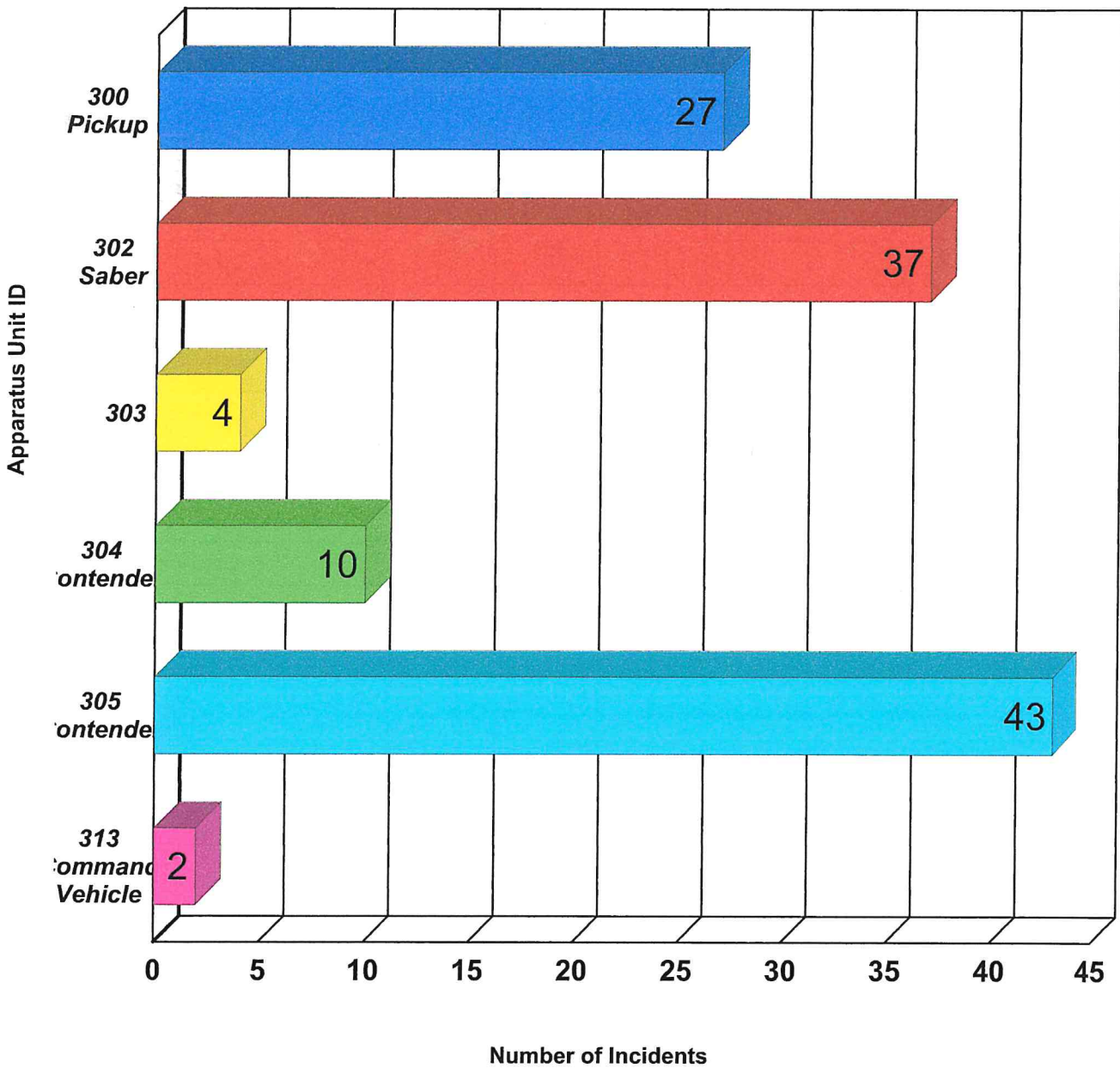
Percentage Value:

100 Series-Fire	2	1.87%
300 Series-Rescue & EMS	63	58.88%
400 Series-Hazardous Conditions(No fire)	5	4.67%
500 Series-Service Call	28	26.17%
600 Series-Good Intent Call	5	4.67%
700 Series-False Alarm & False Call	4	3.74%

Grand Total: 107

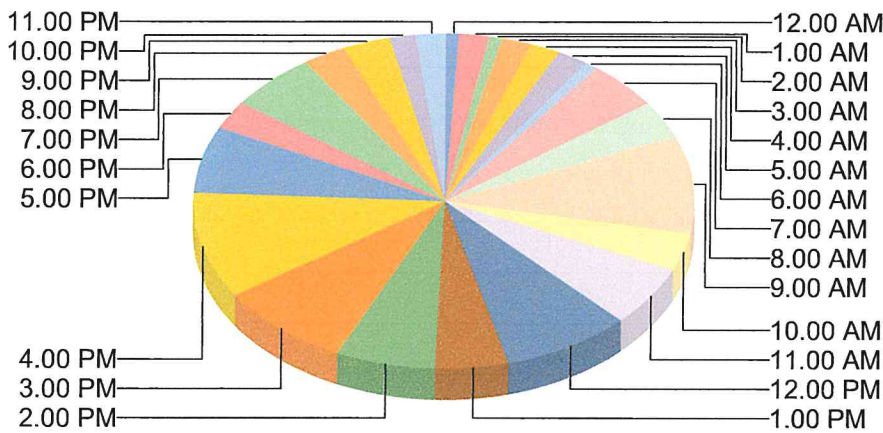
Type Of Incident Most Frequent: 300 Series-Rescue & EMS

Apparatus Responding to Incidents



Total Amount of Incidents: 107
Apparatus Count: 6

Incident Statistics by Hour of the Day



12.00 AM	0.9%
1.00 AM	1.9%
2.00 AM	0.9%
3.00 AM	1.9%
4.00 AM	1.9%
5.00 AM	1.9%
6.00 AM	0.9%
7.00 AM	4.7%
8.00 AM	3.7%
9.00 AM	9.3%
10.00 AM	3.7%
11.00 AM	5.6%
12.00 PM	8.4%
1.00 PM	4.7%
2.00 PM	6.5%
3.00 PM	8.4%
4.00 PM	10.3%
5.00 PM	6.5%
6.00 PM	2.8%
7.00 PM	5.6%
8.00 PM	2.8%
9.00 PM	2.8%
10.00 PM	1.9%
11.00 PM	1.9%
Total:	100.0%

Hour of the Day: 12.00 AM

Total # of Incidents: 1.00 % of Total Incidents: 0.93%

Hour of the Day: 1.00 AM

Total # of Incidents: 2.00 % of Total Incidents: 1.87%

Hour of the Day: 2.00 AM

Total # of Incidents: 1.00 % of Total Incidents: 0.93%

Hour of the Day: 3.00 AM

Total # of Incidents: 2.00 % of Total Incidents: 1.87%

Hour of the Day: 4.00 AM

Total # of Incidents: 2.00 % of Total Incidents: 1.87%

Hour of the Day: 5.00 AM

Total # of Incidents: 2.00 % of Total Incidents: 1.87%

Hour of the Day: 6.00 AM

Total # of Incidents: 1.00 % of Total Incidents: 0.93%

Hour of the Day: 7.00 AM

Total # of Incidents: 5.00 % of Total Incidents: 4.67%

Hour of the Day: 8.00 AM

Total # of Incidents: 4.00 % of Total Incidents: 3.74%

Hour of the Day: 9.00 AM

Total # of Incidents: 10.00 % of Total Incidents: 9.35%

Hour of the Day: 10.00 AM

Total # of Incidents:	4.00	% of Total Incidents:	3.74%
Hour of the Day: 11.00 AM			
Total # of Incidents:	6.00	% of Total Incidents:	5.61%
Hour of the Day: 12.00 PM			
Total # of Incidents:	9.00	% of Total Incidents:	8.41%
Hour of the Day: 1.00 PM			
Total # of Incidents:	5.00	% of Total Incidents:	4.67%
Hour of the Day: 2.00 PM			
Total # of Incidents:	7.00	% of Total Incidents:	6.54%
Hour of the Day: 3.00 PM			
Total # of Incidents:	9.00	% of Total Incidents:	8.41%
Hour of the Day: 4.00 PM			
Total # of Incidents:	11.00	% of Total Incidents:	10.28%
Hour of the Day: 5.00 PM			
Total # of Incidents:	7.00	% of Total Incidents:	6.54%
Hour of the Day: 6.00 PM			
Total # of Incidents:	3.00	% of Total Incidents:	2.80%
Hour of the Day: 7.00 PM			
Total # of Incidents:	6.00	% of Total Incidents:	5.61%
Hour of the Day: 8.00 PM			
Total # of Incidents:	3.00	% of Total Incidents:	2.80%
Hour of the Day: 9.00 PM			
Total # of Incidents:	3.00	% of Total Incidents:	2.80%
Hour of the Day: 10.00 PM			
Total # of Incidents:	2.00	% of Total Incidents:	1.87%
Hour of the Day: 11.00 PM			
Total # of Incidents:	2.00	% of Total Incidents:	1.87%
<u>Grand Total Incidents:</u>	<u>107.00</u>		



Moberly!

Parks & Recreation

Monthly Report

October 2019

	2019		2018
		Campground Daily(183)	
Thompson Campground	192	Campground Monthly(3) Tent Camping(4) Campground Overflow(2)	146
Misc Thompson Campground	-	Dump Station (1)	-
Miscellaneous Park Fees	\$474.80	Memorial Trees, Raw Water, Dump Station	\$1,033.20
Overnight Fishing Passes	1		1
Paddleboat Rental	0	Paddle Boat()	6
Canoe Storage	-	Boat Storage ()	-
Archery Range	-		-
Overlook & Plaza	-		-
Midway	-		-
Agricultural Barns	1	Internal: Department Fall Festival(1)	1
Equestrian Area/ Rodeo Ground	-		-
James Youth Center	7	S.H.I.N.E. Program(1) 4-H Meetings(3) Funeral Dinner(1) Family Reunion/Event(2) Rotary Meeting(5) Class Reunion(1) Wedding(1)	12
Lodge	9	Retirement Luncheon(1) Internal: Department Fall Festival(1 res. For 3 days)	11
Lion's Beuth Park	-		-
Fox Park (entire)	0		1
Fox Park Pickleball/ Tennis Courts	1	Pickleball court rental(1)	0
Shelter 1 Tennis Courts	-		-
Tannehill Park	4	Farmer's Market(4)	0
Wilhite Tennis Courts	-		-
Depot Park	-		-

Parks

		2019		2018
Fields	Red 1	2	Cross Country Meets(2)	0
	Red 2	2	Cross Country Meets(2)	0
	Blue 1	7	Cross Country Meets(2) Little Spartans Football games(1) Little Spartan Football Practices(4)	10
	Blue 2	3	Cross Country Meets(2) Little Spartans Football games(1) Cross Country Meets(2) Little	10
	Blue 3	7	Spartans Football games(1) Little Spartan Football Practices(4)	10
	Green 1	2	Cross Country Meets(2)	0
	Green 2	2	Cross Country Meets(2)	0
	Green 3	16	CoEd Adult Softball Games(13) Cross Country Meets(2) Lewis & Clark Tournament(1)	0
	Green 4	3	Cross Country Meet(2s) Lewis & Clark Tournament(1)	0
	Green 5	3	Cross Country Meets(2) Lewis and Clark Tournament(1)	0
	Green 6	2	Cross Country Meets(2)	0
	Groeber	-		-
	Meinert	1	Internal: Department Fall Festival(1)	0
	Patrick	1	Internal: Department Fall Festival(1)	2
	Fox Field	-		-
	Batting Cages	4	Internal Hold: Block for Cross Country Meets(4)	0

		2019		2018
Shelters	Shelter 1	1	Corn hole Tournament(1)	0
	Shelter 3	-		-
	Shelter 5	-		-
	Fox Park Shelter	2	Birthday Party(1) Church Picnic(1)	0
	Klein Shelter	2	FFA Barnwarming(1) Birthday Party(1)	2
	Lake Pavilion	2	Birthday Party(1) Wedding(1 res. For 2 days) Saving Dogs 4 Paws Event(1)	1
	Riley Pavilion	2	Internal: Department Fall Festival(1)	2
	Meditation Garden and Legacy Overlook	-		-

2019

2018

Auditorium

Entire Facility	5	PD/FD Blood Drive(1) United Way Eats and Beats(1) Wedding(1 res. For 3 days) Internal: City Health Fair (Internal hold for 2 days) Internal Block for set-up/clean-up(1)	6
-----------------	---	---	---

2019

Aquatic Center

Entire Facility	-		-
Party Area	-		-

2019

2018

Recreation

Fall Festival	1200-1500		1000
Trick or Treat Trail	1500 40-50	Attendance (total includes adults) Participating businesses	2500-3000 70

Director – Troy Bock

- Smith Heating and Cooling replaced the two remaining heat pump systems at the James Youth Center.
- With Park Board and Council approval, the solar shelter for the ag barn area will be increased in size to match what we committed to in the 10 year plan and allow for demo of the pig barn, better utilizing our resources and cleaning up older buildings with maintenance needs. This – including the demo – is part of the 10 year plan. However, the urgent condition of a couple of the barns combined with the opportunity of the solar project allowed us to do the project earlier than anticipated.
- Attended the MATC Business Advisory lunch where they seek feedback from community business leaders on the needs of employers so they can structure their program to better position their students to fit those needs.
- Worked with Friends of the Park to set aside funding from a donor for improvements at the war memorial area including LED lighting upgrades. Those upgrades have begun replacing the last generation of lighting and will position us well for many years to come.
- Coordinating with Friends of the Park on donations for other projects including the cart paths at Heritage Hills and lifeguard stands at the aquatic center. We are still looking for two additional businesses to donate toward lifeguard stands (\$1,700) and have their business sign located on the stand *for the life of the stand*.
- We are making budget adjustments in light of the current trend with sales taxes and the health trust balance. Currently, we have held up two CIP items (Truck & UTV).
- A few golf course updates are below. We hope to focus on necessary maintenance and improvements while being budget-wise. A few improvements will help members, donors, and corporate members see their dollars are being wisely invested in the future of the course:
 - Crack sealing and a seal coat on the main parking lot will be done at the golf course in the spring as the contractor's schedule is booked up for fall. Once completed, we will have lines repainted and also paint lines for the staging of golf carts by the clubhouse to keep them organized.
 - The golf course has also gone to an offseason hours policy which is pretty nuanced. They have posted it on their Facebook page and have been letting their members know. It is a policy utilized at all GREATLife courses. The key is to have at least minimum, consistent hours advertised and, as weather allows, they will open all day.
 - Course staff is working on periodic entertainment including Eric's band and catered food on November 23rd. They hope to continue with social activities to keep the golf course on the map and appeal to more of the public.
 - Some tree removal will occur over the offseason, particularly with ash trees that show signs of a borer. We have not received confirmation from Conservation, but there is a possibility it is Emerald Ash Borer.
 - Cart path work continues.

Administration – Leslie Keeney

- Processed bills and timesheets for the department.
- Continued working with Civic Rec in an attempt to move forward in making campground reservations through their software system.
- Discussed and held meetings regarding the maintenance of the main floor in the Municipal Auditorium.
- Continued talks with Midget League and Optimist at ball programs for 2020.
- Oversaw day to day operations of Parks and Recreation Office.

Dirk Miller – Park Superintendent

- Continuing to cut down dead trees. Removed three trees at the Dog Park that were dead or dying. On the other side, we've planted eight trees, four of which were Memorial trees, and have watered them several times so far. We are searching for two more, and if found, will complete this year's Memorial trees. Trimmed the lower branches on trees around the Parks, added mulch to those that needed it, and removed the cages from ones that had grown and/or added them to new ones.
- Had the Pool (including sprinkler system) and Complex completely winterized, as well as the bathrooms at Fox, Beuth, Dog Parks, Groeber, Conservation, and the Rodeo building. Rangers are now on "winter hours". Removed the two paddleboats and fountain from Rothwell Lake, as well as the tennis/pickle ball nets from all three courts.
- Mostly finished with the ditch once filled with Rip Rap at Candy Cane Playground. Planted sod to this adjoining area. Continuing to water the sod and are planning to update the looks of the Shelter by the playground, weather permitting.
- Removed the wiring and boxes from the two southern open-air barns prior to the demo. We saved the wire and boxes for the County Fair people to reuse.
- In the process of putting up and repairing Christmas displays.
- Working on lighting at the War Memorial area.
- Smith Refrigeration changed out the two heating/cooling systems at the James Youth Center.

Jacob Buntten-Athletic Complex Supervisor/Sports Manager

Athletic Complex:

- Ribbon Cutting for new parking lot was October 15th.
- Complex restrooms were winterized, and signage put up.
- Funbrella's were winterized.
- Fall over-seeding and fertilizer applications were applied.
- Three October Glory Maples and three Pin Oaks were planted throughout the complex.

Sports:

- Hosted the Moberly High School Cross Country Invitational October 3rd and Conference Meet October 19th.
- Hosted the Lewis and Clark softball tournament October 5th.
- Hosted Little Spartan football games October 12th.
- Little Spartan football practices were held every Tuesday and Thursday nights.
- Fall Adult softball league was held every Tuesday night and concluded October 22nd.

Amanda Warder – Recreation Supervisor

Concessions:

- Complete for the season

Events:

- November is relatively slow on the event front.
- Working on Frosty 5K and Father/ Daughter Dance which is in February 2020.
- The Activity Guide is almost completed for 2020. Staff has been tossing around new ideas for programs to bring to the community for the new year.

Alex Westhues – Recreation Assistant

- Continued posting Facebook ads and other posts such as Throw-back Thursdays, Fun Fact Friday, etc. to continue to increase engagement on our Facebook page.
- Planned this year's Trick or Treat Trail by reaching out to participants, both from last year and new ones this year.
- Communicated with Dirk and Todd on facility set-ups, etc.

Director of Utilities Monthly Report, Mary West-Calcano, Director

November 2019

Director's Summary

Energy Solutions Professionals Project: The demonstrations of the utility billing software and other modules for City operations were held the week of November 4. Two expanded demonstrations will be held for the utility billing software to make sure we understand the functionality and ability of the software to perform as we need for the automated meter information systems with the new meters. ESP is negotiating with the two top meter vendors to determine final pricing. We should know the meter technology and brand of meters selected within the next week.

The update for the billing, financial and other modules is anticipated to take longer than we had hoped. The vendors indicate that it will be a 6 – 12 month process. The City/ESP Team is brainstorming on next steps and the order of the project to be able to move forward with the meter change-out and still achieve our goals and timeline.

Lead and Copper Rule Update (EPA) EPA has published a draft rule regarding the replacement of lead service lines and the treatment of water to assure that the water being produced at the water plant is not corrosive. The City will have to have a full inventory of any remaining lead service lines with an associated plan for replacement of these lines. Staff is working on planning for these requirements now, to determine future impact. As part of the meter replacement project, the meter installation contractor will be required to log lead service lines on both the City's side of the meter and the house side of the meter. This will provide us with the inventory and then a schedule for replacements can be developed.

DNR Regionalization Grant: DNR announced a grant opportunity to fund 100% of the costs for sewer facilities that are willing to voluntarily regionalize. Utility staff have spoken with the DNR Financial Assistance Center and we have expressed interest in applying for a grant to allow facilities along Route JJ to connect to the City's sewer system. This is the first time this grant is being offered, and the Route JJ project qualifies since several entities are in enforcement. Details are being worked out and more information will be forthcoming in December.

Sugar Creek Lake Source Water Protection Plan: The draft of the Source Water Protection Plan is complete, and staff would like to hold a public meeting to receive public comment during December. This is a good time for residents and land owners to have time to meet and review the program. A copy of the draft will be forwarded to the City Council for review next week. Once the document has been through the public input stage, it will be submitted to DNR for review and approval. This SWPP allows the City to apply for additional federal funding for water protection programs and activities in the watershed. The goal of the document is to reduce sediment and nutrient loading on the Lake through voluntary best management practices from all uses in the watershed including industrial, transportation, residential, and agricultural.

Dept. Summary:

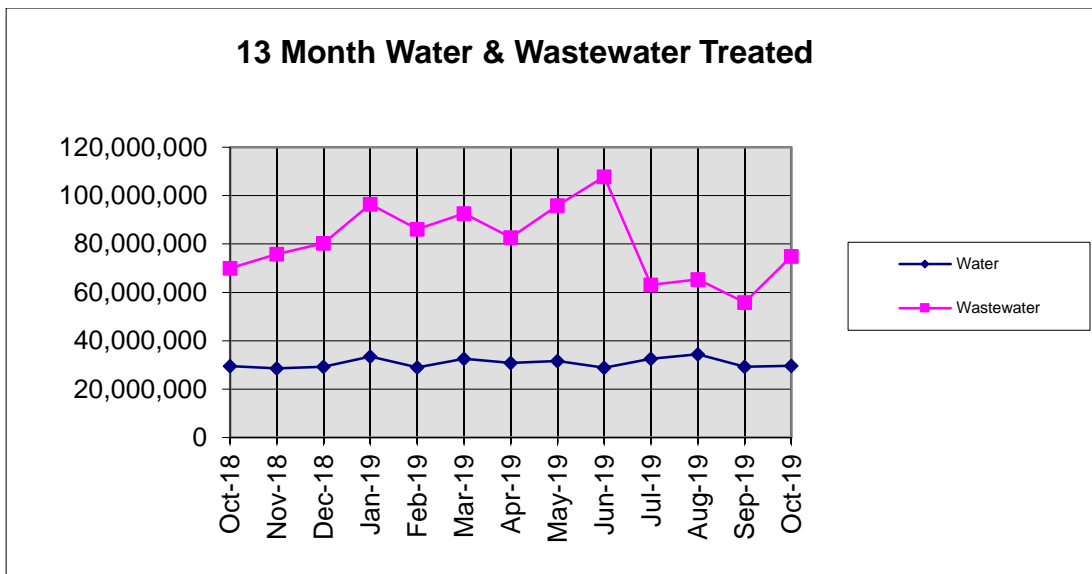
Drinking water produced: 29,676,319 (.957 MG/Day)
 Wastewater Treated: 74,886 MG (2.416 MG/Day)
 Wastewater from Combined Sewer Overflows: 1.46339 MG
 Total precipitation for October 3.92 inches

Billing activity: 20,165,302 gallons of water in the amount of \$195,896.07 and 18,922,749 gallons of sewage in the amount of \$242,670.07

Staff issued 2518 bills for cycle 1 in the amount of \$227,323.41 and 2734 bills for cycle 2 in the amount of \$345,050.89 that included water, sewer, garbage, tax and arrears outstanding.

Unaccounted Water for October 2019 = 28.3%

Month	Water Produced	City Usage/ Unbilled	Water Leaks	Hydrant Flush	D&C Maint	Metered/Billed	Accounted	Unaccounted
Oct-19	29,676,319	1,063,056	503,703	0	0	20,165,302	21,762,061	7,914,258



Distribution and Collection Department and Customer Service

- There were four water main leaks repaired in October.
- There were 15 sewer calls.

- Willis Bros. completed two emergency sewer repairs: 617 Gilman and 719 Taylor. D&C staff repaired a sewer at 619 Epperson (abandoned service line).
- Replaced lead service line at 618 Fisk Ave. and 931 Franklin Street.
- Replaced fire hydrant at 1017 Cecile Lane.
- Replaced 14' of 8" water main in the 200 block of N. Fourth Street due to rusty water after new service tap was installed.
- Replaced twenty-nine-meter pits, four meter valves, and five air release valves, and assisted with other meter pit repairs such as replacing frames and covers in preparation for the meter change out.
- There were no sanitary sewer overflows observed in October.
- Raised three manholes in various areas.
- Poured 4.75 cubic yards of concrete.
- Worked on winterizing and cleaning vehicles and various equipment and continued working on active work orders.

Wastewater Treatment Facility

- Treated 74,886 MGM an average of 2.416 MGD.
- Transferred 706,080 gallons of sludge from the SBR's to the digesters.
- 3.92 inches of rain fell over a 11-day period.
- Land applied 275,130 biosolids to the application field at the WWTP.
- Taylor CSO (outfall 002) discharged an estimated .581 MGM on 10/10/19 due to rain events.
- Rollins CSO (outfall 003) discharged .878 MGD on 10/01/19, through 10/05/19 due to rain events.
- Seven Bridges CSO (outfall 004) no discharge.
- Holman Road CSO (outfall 005) Discharged 0.00439 MGM on 10/10/19, 10/21/19 and 10/30/19 due to rain events.
- Pump #2 at McKinsey station was pulled and we removed a piece of green PVC pipe and a small chunk of wood from the impeller. The pump was returned to service and operating normally.
- Attended a meeting with Cardinal Health to discuss monitoring their wastewater process.
- Met with ESP several times to discuss upgrades to the WWTP.
- City staff from the street barn installed a new fence around the solar panels at WWTP.
- R.E. Pedrotti and NEMO Electric performed trouble shooting on the electrical systems in the PLC at the WWTP to determine why influent pump #2 would not run in the automatic position. Adjustments were made to the programming in the PLC and a new Mini CAS controller was installed in the switch gear at the influent pump station to correct this issue. All influent pumping operations have returned to normal.
- Pump #1 at Darwood station was pulled, rags and debris were removed from the impeller, the pump was then returned to normal operation.
- City staff and NEMO Electric upgraded the lighting in the main building at WWTP to LED.
- Vandevanter Engineering serviced all pumps at WWTP and Seven Bridges station. The pumps at WWTP are operation normally and in service, all 3 impellers at Seven Bridges station were found to be cracked and will need replaced. The cost estimate is \$24,000, Pump #1 was cracked enough it was taken out of service to prevent further damage to the pump and motor.

Billing and Collections

- Started software demonstrations for Utility Billing software.
- Met with Vendors to start the selection process on meters and software.

Water Plant

- We treated and pumped to town 29,676,319 gallons of water. A daily average of 957,300 gallons per day.
- Performed 3,620 lab tests on water at different stages of treatment.
- Collected and prepared samples for the microcystins on Rothwel and Waterworks lakes.
- Collected and sampled water at 8 locations around the lake for in house plant operations.
- Collected and shipped distribution samples, for DNR compliance, to include the following- 16 Bacteriological samples, Total Organic Carbons and Fluoride.
- Treated 84,179 gallons of sludge and hauled to the landfill. This equates to 164,140 pounds of dried sludge being dumped in the landfill.
- Performed corrective repairs on Pre chlorine injection.
- Performed semi-annual preventative maintenance on the Free and Total Chlorine Analyzers.
- Continued working on rebuilding and testing meters with parts that we have on hand to get through winter months. Continued upgrades to the meter maintenance building to include paint of exterior, bars on windows for security and building a blueprint library storage area to protect the cities records.
- Pulled high service pump #2 and sent to Flynn Drilling for repairs.
- Installed access pits in the drive behind the plant to be able to test and confirm water meter accuracy leaving the plant. Even though we have very accurate magnetic flow meters, this will allow us to confirm semi-annually and keep records of the flow leaving the plant.
- Began and completed a LED lighting upgrade at the water plant and wastewater plant. A total of 392bulbs were replaced at a cost of \$5150. The Ameren rebate will cover approximately \$3296 of this cost with a return on investment at both locations of .63 years.

Sugar Creek Lake Ranger

- Spoke to Apollo septic to have them come clean out the holding tanks at the ranger station.
- Worked on the roads at sugar creek lake and spread some gravel near the boat ramp at the lake.
- Worked on winterizing equipment, changing oil, and items for the tractor.
- Completed maintenance around solar panels such as mulching and weed eating.

Water Quality Coordinator

- Accepted 905.5 lbs. hazardous waste into the Household Hazardous Waste Facility.
- Gave out 609.8 lbs. products for re-use from Household Hazardous Waste Facility.
- Stabilized and recycled 789.65 lbs. of non-reusable material.
- Inspected priority areas around town to check for pollution and illicit discharge.
- Met with Barr Engineering and measured culverts in sweet springs watershed.
- Weeded City Hall rain gardens and burned weeds.

- Met with Barr Engineering about rehabilitating City Hall and HHW facility rain gardens.
- Began preliminary aping of stormwater system.
- Met with Mary West, Troy Bock, and Tom Sanders in regard to the DNR Stormwater inspections, dye testing, employee and pilot training.
- Purchased supplies for cold water sampling and for Household Hazardous Waste facility recycling.
- Performed illicit discharge water testing along highway 24.
- Delivered old fire extinguishers to Dennis Stanley for recycling.
- Researched DNR pesticide requirements.
- Submitted final reports for Household Hazardous Waste Facility project and E-waste project to MTRCOG.
- Held open Household Hazardous Waste Day on October 12th.
- Met with Magic City Master Gardeners to maintain Rothwell Park Railroad Garden and discuss plans for next year.



Moberly Area Chamber of Commerce
211 West Reed | Moberly, MO 65270
p. 660.263.6070 | f. 660.263.9443
www.moberlychamber.com
www.moberly.com

November 18, 2019

Report on: Tourism Promotion Services Agreement

Services Completed:

- Implementing techniques learned from Marketing College & working with Tourism Consultant on these strategies
- Submitted FY19 Missouri Division of Tourism Final Report
- Worked on FY20 Missouri Division of Tourism Quarter 1 Report
- Published a Shepherd Farms ad, fishing ad, Amish ad and a golf course ad
- Continued pitching to travel writers and group tour operators
- Finalized November newsletter & sent it out
- Started working on the 2020 Visitors Guide
- Attended Missouri Travel Alliance Story Workshop
- Filled swag bags & greeted the event organizer for the Missouri State Association Beekeepers Fall Conference (brought in about 150 people on October 18th & 19th)
- Gave swag bags & greeted Missouri Main Street Fall Conference group (had 60 people on Nov. 9th)
- Wrote press release about Beekeepers conference & blog over Evelyn Jorgenson Gallery
- Continued revisions to Tourism website (www.moberly.com) to optimize performance and information being distributed. Updated content to reflect new events, activities and submissions.
- Generated and shared social media posts for all Randolph County events to promote regional activity
- Met with Dan Kruse & Dr. Miller about a partnership with the CAPS program
- Updated monthly social media content calendar to increase engagement on all Chamber sites
- Promoted all upcoming events on social media, weekly Chamber Chat, submitted them to Moberly Monitor-Index and Missouri magazines
- Restocked hotels and checked in with Comfort Inn, Super 8 and Thompson Campground
- Answered all calls and emails regarding events and assets in Randolph County.
- Began generating the 2020 budget & action plan
- Continued updating the community calendar and Tip Tuesday, a weekly tip to all tourism partners
- Identifying potential travel writers with Tourism Consultant

Services Planned:

- Continued planning the Moberly Christmas Festival
- Communicated with Tourism Assets to discuss 2020 programming
- Develop Cooperative Marketing Efforts with Tourism Consultant
- Develop Performance Measures with Tourism Consultant
- Planned Downtown webinar for November



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Social Media Reporting - 2019

	June	July	August	September	October	November	Dec	Notes
Facebook-Chamber Page	3,142	3,322	3,350	3,405	3,486	3,532		
Facebook-Depot District	No Report	439	440	495	533	536		Created in Dec of '18
Facebook-Railroad Days	No report	3,268	3,269	3,266	3,270	3,273		
Facebook-Com Betterment	No report	143	143	150	144	144		
Twitter	441	444	449	453	455	458		
Instagram	548	582	590	606	631	648		
Instagram # of posts	430	459	469	489	508	531		

The Missouri State Beekeepers Conference had 31 rooms at Comfort Inn, 10 rooms at Super 8 and an estimated five spaces at the Campground.

MAEDC Economic Development Report

October 13, 2019 – November 16, 2019

MAEDC Activity Highlights

- Prepared for site visit with Project Emerald
- Communicated with City of Moberly Community Development regarding feedback from their zoning consultant regarding the proposed lot split on Project Emerald
- Heard news
- Hosted 3rd site visit for Project Emerald. Company brought engineering team to assess technical details of the site, infrastructure, water utilities and energy. Project Team also brought legal counsel to discuss relevant zoning and land use considerations.
- Conference call with Tom Cunningham regarding Project Emerald due diligence. Company requested participation from local community to assist with financing the investigative efforts
- Moberly Downtown CID meeting, CID discussed infrastructure plans and NID project. Final designs are forthcoming for the public improvement plan.
- Met with Moberly City Council to discuss Project Emerald due diligence request.
- Discussed due diligence requirements on Project Emerald with City of Moberly staff. Clarified with Project Emerald team to ensure there was general understanding of the information being sought.
- Discussed hosting a Leadership NE session in Moberly for the 2020 year with the planning committee
- Communicated with DED about recertifying the Moberly Area Industrial Park and the Howard County Industrial Park.
- Communicated with the City of Paris regarding recertifying their Industrial Park
- Worked with an ad-hoc committee of NMDP about potentially doing succession planning in NE Missouri. NMDP has identified succession planning as an important focus for the region moving forward.
- Discussed Project Software 2019 with City of Moberly Public Utilities
- Worked on finalizing an MOU extension with Missouri SBDC
- Conference Call with Missouri Partnership regarding Project Emerald
- Met with Howard County Commission, discussed MAEDC initiatives with them and was joined by Randy Asbury and JB Waggoner. Also discussed reorganizing the Howard County EEZ Board for a potential project.
- Presented with Randy Asbury to the Randolph County Pachyderm Club about economic development and MAEDC's efforts
- Attended NMDP meeting in Macon
- Presented to CMU Board of Trustee's about economic development and Fayette's plans are in the future.
- Communicated with a local company interested in pursuing safety training certifications and customized training with the State of Missouri.
- Requested and received updated proposal from engineering firm performing due diligence work on Project Emerald.

- Coordinated with HCEDC about attending a project meeting with MAEDC for an expansion project in Howard County.
- Followed up with Project Software 2019
- Received updated PPI Contract from CVR to include signage provisions. CID wanted to see businesses participating in the incentive program display signs showing the Depot District.
- Spoke with a local business about potential nuisance issues regarding a neighbor of theirs that is renovating their facility. Shared concerns with City officials and issues were resolved.
- Shared local engineering contacts with Project Emerald
- Project Emerald shared concerns they had regarding the varied ownership at the Moberly Area Industrial Park. Strategized with the City of Moberly about avenues that could be taken to address the concerns.
- Planned conference call with CVR and Project Emerald to discuss the mechanics of incentives and the approach City of Moberly typically uses.
- Attended lunch and learn with the Missouri Asphalt Paving Association
- Met with Brian Crane regarding Project Emerald
- Conference Call with Trade and Industry magazine regarding advertising opportunities in 2020.
- Received an extension for the City of Paris' Certified Site application
- Gathered interest from 2 local entrepreneurs about potential loan program opportunities for their companies.
- Continued to field and address clarification questions from Project Emerald.
- Arranged conference call with mixed use developers from Pennsylvania
- Submitted Moberly and Monroe City for Project Black II
- Project Emerald incentives conference call with CVR and Project Team. CVR presented information on the process and made recommendations about the approach we would prefer to take for the project.
- Held a conference call with Mark Twain Regional Planning Commission and MO DED about potentially utilizing CDBG for the extension of a water line to service Project Software 2019
- Met with Kevin Stone to discuss assessment questions for Project Emerald
- Conducted BRE visit with Everlast
- Met with Capital Paving to discuss current projects
- Conducted staff performance reviews
- Forwarded due diligence MOU to Project Emerald and Missouri Partnership
- Conducted site visit with Retail Strategies to explore the real estate opportunities in the market. Consultant talked through options of different properties and which appeared more development ready than others.
- Presented Project Emerald with the local incentive offer from the City of Moberly
- Received information from Moberly Natural Crush about new board members and investment opportunities they have experienced.
- Received preliminary information from the surveyor doing the ALTA Survey for Project Emerald. Did not encounter any encumbrances in the survey.
- Discussed a potential RFI that was forwarded to Howard County from Missouri Partnership. Discovered Howard County was not within the search area and unable to submit for the project.
- MAEDC offices were closed in observance of Veteran's Day

- Held a conference call with mixed use developers interested in identifying communities for lifestyle developments. Shared the opportunities in our area and scheduled follow up conversations.
- Had lunch with Greg Stidham, Kyle Elliot, and JB Waggoner about the Fayette CID District
- Held a conference call with Retail Strategies and a local landowner
- Participated in Missouri Partnership cooperative marketing webinar
- Met with John Meystrik of Central Bank to discuss a revolving loan fund the Moberly Downtown CID is interested in establishing. Discussed a framework for how the program would work and prepared to present it to the Board of the CID.
- Met with Project Industrial 2019 with HCEDC. Project includes the construction of several new facilities and potential addition of 100 jobs.
- Held conference call with Missouri Partnership and DED regarding state incentives for Project Emerald.
- Toured the Associated Electric Power Plant at Thomas Hill, attended NMDP Meeting
- Sent updated project list to Howard County for HCEDC Board Meeting
- Worked with KWIX/KRES to do MAEDC Holiday Greetings
- Received potential prospect inquiry from City of Fayette, Randy will follow up
- Updated Project Emerald on the status of several outstanding questions
- Sent more information to Project Software 2019 about their potential project
- Finalized the next round of PPI applicants for the Moberly Downtown CID
- Followed up with a potential prospect considering purchasing and renovating an existing facility.
- Sent follow up information to County Assessor regarding Project Emerald
- Spoke by phone with Chuck Carter, AAA Insurance, and discussed insurance trends and the local economy
- Met with Bill Stuart, Cater Funeral Home, and discussed workforce issues, mortuary trends, and area attitudes
- Met with Mark Harbison & Kyle Elliott, Commercial Trust Co.; Bruce Addison, Addison Labs; and J. B. Waggoner, Inovatia Labs, to discuss Howard County issues, CID questions and options, local community and business leadership, and the roles of various players in future economic development progress
- Met with Fayette Superintendent Jill Wiseman to discuss public education, the possible local CID, and economic development issues
- Held Glasgow Office Hours on October 5 & November 12: visited with store owners/staff as available in downtown area.
- Met with Diane Simbro, NEMO Workforce Development Board to discuss workforce availability issues and workforce training activities
- Met with Mike Skubic, First State Community Bank, and discussed lending trends, interest rates, small business development counseling opportunities, and the local economy
- Met with Jim Roberts, The Crossings, and discussed retail business and commercial real estate trends, Moberly's downtown CID, and workforce- and education-related issues
- Hosted meeting with local business owners and Shari Schenewerk, DED, to discuss various projects in the Moberly area. Provided the company owners with questions related to information the City of Moberly needs related to the company's water demands
- Attended Monroe City Chamber of Commerce meeting. Provided all attendees with recently completed MAEDC information.

- Spoke with Monroe City Alderwoman Connie Painter. We spoke and emailed on two other occasions
- Held Paris Office Hours and visited community business owners including Daniel Miller, Missouri Real Estate; Kim Crist, Paris Hardware & Supply; Lisa Minor, Monroe County Abstract; Robin Gregg, Monroe County Appeal; Monroe County Co-op Services Manager; and, Brent Gholson, potential entrepreneur
- Met with Matt Cleavinger & Brandon Krapfl, County Bank, and discussed workforce availability, lending trends, and the local economy
- Met with Warden Dean Minor, Moberly Correctional Center, and discussed his 30-plus year career coming to an end on November 1, workforce training for offenders, and cultural changes he's experienced during his time at MCC
- Met with Todd Culley, Boone Electric Cooperative, and discussed current trends in their cooperative area regarding workforce issues, Columbia regulations and crime, and issues related to the movement of people from the downtown Columbia area to various locations on the edges of Columbia. Due to these issues, he felt bordering counties would see an uptick in housing purchases and relocations
- Met with Brandon Lucas, Fusion Technology, regarding retail business trends, area workforce issues, and economic development in general
- Met with Richard Fowler & Amber Overfelt, Howard Electric Cooperative, to discuss Howard County economic development issues, strategies, and relationships
- Met with J.B. Waggoner, Michael Bugalski, and Howard County Commission to discuss board appointments for the county Enhanced Enterprise Zone and a potential Glasgow project
- Met with Michael Bugalski, Amber Overfelt, and J.B. Waggoner to discuss Howard County economic development strategy and issues
- Spoke with Fayette Mayor Greg Stidham by phone regarding the city CID
- Held Fayette Office Hours and visited with City Administrator Robin Triplett, and Sarah Linhart, Paisley Bow-tique
- Attended and spoke at Randolph County Pachyderm Club with Michael Bugalski
- Met with J.W. Ballinger and discussed the benefits of MACC to the area, what role MAEDC might play in addressing workforce concerns, and the benefits to MAEDC providing regular updates via local media outlets
- Met with Michael Bugalski and David Black, Dura Automotive, for a plant tour and visit regarding Dura company trends and workforce issues
- Met with Holly Wipfler, Ameren, to discuss Ameren economic development support and commercial business utility rates
- Met with Tim Seidel, Edward Jones, and discussed his thoughts regarding Moberly's economy, ways to improve the business districts, and bringing a higher-class restaurant to Moberly
- Met with John Cochran, Valentine Insurance, and discussed insurance trends, the local economy, and MACC benefits to the area
- Met with Stan Hulett, Mack Pro, and discussed business levels, workforce issues, and business competition in general
- Held Monroe City Office Hours and visited Monroe City businesses including Matthew Perrine, Applebee Tree, and Georgia Rothweiler, Opera House Antiques & Uniques. Followed up with Georgia about her desire to speak with Lindsey regarding building incentives for small businesses

- Met with Gary Seidel, Moberly Lumber, and discussed building supply sales, workforce issues, and his thoughts regarding economic development ideas he's experienced while traveling the nation that he felt were successful for small communities he's visited
- Met with Sam Richardson, Moberly Area Technical Center, for a visit and tour of the tech facilities. They offer a variety of hands-on and soft skills career training that includes student's use of up-to-date equipment technology
- Attended the Huddle at Central Methodist University with area business and community leaders where a variety of projects and issues were discussed across a plethora of issues
- Met with David Weis, PK Weis Agency, and discussed health insurance issues, the buying trends of various generations, and the impacts of various political discussions upon the nation's economy
- Met with Jeff Lashley, MACC, to discuss community college issues and economic development training programs. Jeff reviewed the current physical and online presence MACC offers, state appropriations, and other issues relevant to higher education
- Met with Kit Tennyson, Shelter Insurance, and discussed insurance trends and the local economy
- Met with Brad Goessling, Town & Country Abstract, and discussed real estate closing rates, residential inventory trends, the benefits of MACC to the area, and other local area issues
- Joined a MAEDC Executive Committee meeting for internal discussions
- Met with Dr. Matt Miller, Moberly Public School District, to discuss public school issues and career training programs. Dr. Miller desires to develop a strong partnership with MAEDC
- Met with Michael Bugalski and Ray Stewart, Everlast, to discuss their business issues and workforce availability and business and company trends
- Met with Jeff Lawrence, L & J Development, and discussed the local economy in general, and workforce-related issues
- Met with Jane Loeber, Advantage Realty, to discuss real estate trends, housing inventory, etc.
- Met with Dr. Roger Drake, Central Methodist University, to discuss Fayette-CMU relationships, economic development strategies, retirement home development ideas, etc.
- Met with Michael Bugalski, Fayette Mayor Greg Stidham, J.B. Waggoner, and Kyle Elliott to discuss Fayette CID options and strategies
- Spoke with a Fayette restaurant manager regarding potential transition of an area restaurant to a new owner
- Met with Randolph County Sheriff Mark Nichols and discussed workforce issues and law enforcement trends affecting the county
- Spoke with Randolph County Clerk Will Ellis to discuss county issues
- Spoke with State Representative Tim Remole regarding his insights into the upcoming legislative session, workforce availability issues, and other local issues
- Spoke with State Representative Chuck Bayse regarding anticipated economic development legislation, medical marijuana, and the overall expectations of the upcoming General Assembly
- Met with Michael Bugalski, Amber Overfelt, Jonathan Mack, DED project manager, and two Glasgow businessmen regarding three projects
- Spoke three times with an Illinois businessman seeking to bring a business to the Clark area
- Attended and shared MAEDC perspectives with the Howard County Economic Development Council board
- Followed up with Illinois businessman seeking contact information for a culvert issue along state highway right-of-way

- Contacted a Columbia businessman regarding purchase/construction of a new building on the Fayette Square. Awaiting his return call.
- Scheduled meetings, followed up all calls and meetings with appropriate thank you notes or task responses, prepared reports as necessary
- Worked with Tina Bealmer to prepare a professional MAEDC tri-fold for handout purposes

SBDC Activities

- Working in collaboration with the chamber of commerce to facilitate bike rental, sports equipment lockers, and kayak rental.
- Was featured on a podcast about small business in Howard county and the challenges that face rural business owners and areas.
- Held a lecture for high school students on entrepreneurship at Westran focusing on the resources that are provided for small business as well as discuss the challenges that face the local economy and employers, and how our organization works with companies to accommodate their needs.
- Networked with employers participating in employer showcase at Moberly High School
- Attended the central region monthly meeting to discuss center updates, address questions, and protocol for large clients going forward.
- Held Monroe county office hours at city hall.
- Guest speaker for Paris Rotary club highlighting the resources we have available as well as acknowledging the challenges that face rural areas and startups/ existing businesses.
- Meeting with prospective client in Howard county.
- Extended post opening consultation for AirBnb, facilitated the registration process.
- Existing landscaping business in Howard county interested in expanding requested counseling.
- Counseled perspective minority/female rural mail contractor (Randolph Co) wishing to relocate from South Dakota.
- Counseled Marion county client with clothing boutique.
- Christian ministry musician requested counseling declined forwarded to non-profit affiliation
- Continued counsel for Monroe county client through business formation.
- Met with existing business owner (Randolph Co) to discuss expansion of current business and sales.
- Spoke with Monroe City business owner interested in finding resources for building renovations and upkeep. Referred to the city for local programs, if available.
- Corresponded with local lender to accommodate the needs of two clients with unique lending needs.
- Completed annual narrative for SBDC center, including Plan, Action, and Result with three examples of client success stories.
- Invited to attend MACC fall advisory board meeting for business administration department to provide input/insight for program directives.
- Continued counseling for client (Randolph Co) about prospective market for entertainment/food services.
- Counseled Brookfield student on requirements for starting business for class project. Student is working with a local bakery owner to produce her own line of cookie dough.

City of Moberly City Council Agenda Summary

Agenda Number: _____
 Department: Comm. Dev.
 Date: November 18, 2019

Agenda Item: Application for Board of Adjustment.

Summary: In December 2019 one (1) term expires for the Board of Adjustment. This is for Kevin Hall. Contact has been made with this individual and he wishes to remain on the committee. We have advertised for applicants and received one (1) from Kevin Hall. Application is attached.

Recommended

Action: Appoint one individual to the Board of Adjustment.

Fund Name: N/A

Account Number: N/A

Available Budget \$: N/A

ATTACHMENTS:		Roll Call	Aye	Nay
<input type="checkbox"/> Memo	<input type="checkbox"/> Council Minutes	Mayor		
<input type="checkbox"/> Staff Report	<input type="checkbox"/> Proposed Ordinance	M__ S__ Jeffrey	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Correspondence	<input type="checkbox"/> Proposed Resolution	Council Member		
<input type="checkbox"/> Bid Tabulation	<input type="checkbox"/> Attorney's Report	M__ S__ Brubaker	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> P/C Recommendation	<input type="checkbox"/> Petition	M__ S__ Kimmons	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> P/C Minutes	<input type="checkbox"/> Contract	M__ S__ Davis	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Application	<input type="checkbox"/> Budget Amendment	M__ S__ Kyser	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Citizen	<input type="checkbox"/> Legal Notice			
<input type="checkbox"/> Consultant Report	<input type="checkbox"/> Other _____		Passed	Failed

City of



Board/Commission Application Form

Individuals serving on boards or commissions play an important role in advising the City Council on matters of interest to our community and its future. For the most part, Board and Commission members must be residents of City of Moberly. When a vacancy occurs, an announcement of that vacancy will be posted. The City Council will review all applications. The appointment will be made at a formal City Council meeting. Appointees serve as unpaid volunteers.

This application is a public document and as such it or the information it contains may be reproduced and distributed. This application will remain active for two years and you will automatically be considered for any vacancy occurring during that time.

Name of Board or Commission: Board of Adjustment Date: 10/30/2019

Your Name: Kevin Hall Street Address: 413 W. Reed

Phone number(s): (evening) 660-414-5605 (day) Same

Email: jkevin2428@outlook.com

Do you live within the corporate limits of City of Moberly? Yes / No

How long have you been a resident of City of Moberly? 43 years

Occupation: Self employed Employer: me myself and I

Optional Questions (use back of application if necessary)

What experience and/or skills do you have that might especially qualify you to serve on this board or commission?


Real estate appraiser for 30+ years Served on Board of Adjustment for 5+ years

What particular contributions do you feel you can make to this board or commission?

Experience for Business and Real estate for 43 years

I will attend meetings in accordance with the adopted policies of City of Moberly, Missouri. If at any time my business or professional interests conflict with the interests of the Commission, I will not participate in such deliberations. References may be secured from the following individuals:

- 1. David Patton Phone: 660-833-3758
- 2. Cole Davis Phone: 660-651-3317
- 3. Jennifer Lawrence Phone: 660-263-7284



Signature of Applicant

*Additional Information may be attached to this form.

Return to: City of Moberly, 101 West Reed Street, Moberly, MO 65270