LEE'S SUMMIT

### PUBLIC WORKS ENGINEERING DIVISION

# **Inspection Summary**

Permit #: PRPWFR20171746, Public Works Infrastructure Permit - Residential Manor at Stoney Creek 2nd - street, storm, sewer and water

Address:

This work has been inspected and the inspection results noted below. Please call for re-inspection once all corrective actions have been completed. Do not cover any work until approved.

Inspection Item: Inspection:	Inspector:	Outcome:	Date:
DEI-Sanitary Sewer - Invert	Brice Lawson	Pending	
DE-Send Inspection Notice	Brice Lawson	Pending	
DE-Send Inspection Notice	Brice Lawson	Pending	
DEI-Detention Basin	Brice Lawson	Pending	
DE-Permit signed by Contractor	Brice Lawson	Pending	
DEI-Install Street and Stop Signs	Brice Lawson	Pending	
DE-Send Inspection Notice	Brice Lawson	Pending	
DEI-Curb - Proof Roll	Brice Lawson	Pending	
DEI-Curb - Compression	Brice Lawson	Pending	

## Strength

DEI-Street - Proof Roll	Brice Lawson	Pending		
DEI-Street - Base Lift	Brice Lawson	Pending		
DEI-Street - Wedge Lift	Brice Lawson	Pending		
DEI-Street - Surface Course	Brice Lawson	Pending		
DEI-Install Street and Stop Signs	Brice Lawson	Pending		
DEI-Sanitary Sewer - Invert	Brice Lawson	Pending		
DE-Send Inspection Notice	Brice Lawson	Pending		
DEI-Sanitary Sewer - Mandrel	Brice Lawson	Pending		
DEI-Storm - Pipe	Brice Lawson	Pending		
DEI-Storm - Rip Rap	Brice Lawson	Pending		
DEI-Storm - Inlets Clean	Brice Lawson	Pending		
DEI-Storm - Outlet Structure	Brice Lawson	Pending		
DEI-Storm - Swales	Brice Lawson	Pending		
DEI-Water Line - Hydrostatic	Brice Lawson	Pending		
220 SE Green Street   Lee's Summit, MO 64063   816.969.1200   816.969.1201 Fax   <u>cityofLS.net/Development</u> Page 2				

#### Test

DEI-Water Line - Coliform Test 1	Brice Lawson	Pending
DEI-Water Line - Coliform Test 2	Brice Lawson	Pending
DE-Send Inspection Notice	Brice Lawson	Pending
DEI-Water Line - Valve	Brice Lawson	Pending
DEI-Water Line - Fire Hydrant	Brice Lawson	Pending
DEI-Water Line - Thrust Restraint	Brice Lawson	Pending
DEI-Water Line - Construction Taps Removed	Brice Lawson	Pending
DE-Send Inspection Notice	Brice Lawson	Pending
DEI-Sanitary - Material Verification	Brice Lawson	Pending
DE-Send Inspection Notice	Brice Lawson	Pending
DEI-Water Line - Fire Hydrant	Brice Lawson	Pending
DEI-Erosion Sediment Control (ESC) Inspection	Brice Lawson	Pending

DEI-Erosion Sediment Control Brice Lawson (ESC) Inspection

Pending

Pending

Pending

DE-ESC - (Vegetation/Ground Brice Lawson Cover)

DEI-Storm - Sewer Brice Lawson Construction Inspection Corrective action required:

1 Brice Lawson 11/10/2017 11:35 AM

Redford has installed CI 4-1, CI 4-2, CI 4-3 and CI 4-4. The 15" HDPE storm pipe has been installed between CI 4-4 and CI 4-3. The 18" HDPE pipe has been installed between CI 4-3 and CI 4-2. The 24" HDPE pipe has been installed between CI 4-2 and CI 4-1. The remainder of the 24" HDPE storm pipe has been installed between CI 4-1 and FI 2-5. There is approx. 30" of clearance between the existing 12" water main and the 24" storm pipe at the water main crossing on storm line 4. This crossing is just north of FI 2-5. The exterior collars have been installed on CI 4-1 and CI 4-2. The exterior collar on the west pipe at CI 4-4 has been installed. The north pipe collar and invert have been installed at FI 2-5. The west exterior pipe collar has been installed at CI 2-1. The concrete lids have been installed on FI 2-3, FI 2-4 and FI 2-6.

Corrective action required:

2 Brice Lawson 11/14/2017 1:36 PM

Redford installed CI 4-5 and the 15" HDPE storm pipe from CI 4-5 to CI 4-4. The invert and east exterior pipe collar has been installed at CI 4-4. The west pipe collar and invert were being installed.

Corrective action required:

3 Brice Lawson 11/15/2017 10:27 AM

Redford is cutting into the west side of the existing City FI on Storm line 1. The hole is being made to accept a 42" storm pipe.

Corrective action required:

4 Brice Lawson 11/16/2017 11:25 AM

Redford has installed the FI 1-1 and they are installing the 42" HDPE storm pipe between FI 1-1 and FI 1-2.

Corrective action required:

5 Brice Lawson 11/17/2017 11:53 AM

Redford has installed the 42" HDPE storm pipe on storm line 1 from approx. STA. 0+15 to approx. STA. 4+25. FI 1-1 has been installed. The outlet structure has been installed for the detention basin. The 36" HDPE pipe has been installed from the detention basin to FI 1-1. The 24" HDPE pipe has been installed from the outlet structure to the FES located in the detention basin.

The pipe collars have been installed on the three pipes at FI 1-1.

There is a conflict with the 42" storm pipe and an existing 12" water main on storm line 1 at approx. STA. 4+25. This is where the 12" water main crosses the proposed 42" storm pipe.

Redford was removing part of the floor and west wall of the existing FI located at STA. 0+00. This is being done to connect the proposed storm pipe and to install a new invert.

DEI-Storm - Sewer Brice Lawson

Pending

Construction Inspection

Corrective action required:

1 Brice Lawson 11/10/2017 11:35 AM

Redford has installed CI 4-1, CI 4-2, CI 4-3 and CI 4-4. The 15" HDPE storm pipe has been installed between CI 4-4 and CI 4-3. The 18" HDPE pipe has been installed between CI 4-3 and CI 4-2. The 24" HDPE pipe has been installed between CI 4-2 and CI 4-1. The remainder of the 24" HDPE storm pipe has been installed between CI 4-1 and FI 2-5. There is approx. 30" of clearance between the existing 12" water main and the 24" storm pipe at the water main crossing on storm line 4. This crossing is just north of FI 2-5. The exterior collars have been installed on CI 4-1 and CI 4-2. The exterior collar on the west pipe at CI 4-4 has been installed. The north pipe collar and invert have been installed at FI 2-5. The west exterior pipe collar has been installed at CI 2-1. The concrete lids have been installed on FI 2-3, FI 2-4 and FI 2-6.

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There is a conflict with the 42" storm pipe and an existing 12" water main on storm line 1 at approx. STA. 4+25. This is where the 12" water main crosses the proposed 42" storm pipe.

Redford was removing part of the floor and west wall of the existing FI located at STA. 0+00. This is being done to connect the proposed storm pipe and to install a new invert.

Pending

DEI-Grading/Excavation/Fill Brice Lawson Inspection

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Corrective action required:

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

Corrective action required:

6 Tom Chandler 09/15/2017 11:11 AM Backfill on sanitary sewer main being placed today. No testing has been done today. If testing lab can make it to site today they will backfill (3) roadway crossings.

Corrective action required:

### 7 Brice Lawson 09/27/2017 11:33 AM

I informed Mike with KC Testing, Thomas Hudgens and Darrin that the compaction test reports for the sanitary trenches that have been submitted so far do not have documentation for a visual inspection of the initial backfill that is being placed in the trenches. KC Testing will not perform moisture density testing of trenches that are too deep due to safety reasons. I informed them that the City will need documentation of visual inspections of the backfill of the sanitary trenched up to the point where KC Testing can perform the moisture density testing.

Corrective action required:

8 Brice Lawson 11/15/2017 10:30 AM

A crew is using a blade and a scraper and has began final grading and shaping of the proposed road subgrade on Merryman Ln and Amethyst Dr.

Corrective action required:

9 Brice Lawson 11/21/2017 11:33 AM

The road subgrade on this project has some areas that appear to be too wet. The contractor has scarified the entire road width on Amethyst north of approx. STA. 2+00 to approx. STA. 3+60. Areas on Merryman are being removed and replaced with soil that appears to be dryer.

DEI-Sanitary Sewer Brice Lawson Construction Inspection Corrective action required:

1 Brice Lawson 11/22/2017 6:18 AM

On 11/21/17 Redford replaced a broken 45 degree bend at the connection to the wye fitting on the sewer lateral for lot 65. The broken 45 degree bend was located due to a leak that was noticed during the air pressure test.

DEI-Water Line - Construction Brice Lawson Inspection

Pending

Pending

Corrective action required:

1 Brice Lawson 11/10/2017 11:30 AM

Redford installed 40' of 8" C900 water main with tracer wire and water line marker tape. The line appeared to be installed at least 42" from current grade. The pipe was bedded in clean rock. This line was installed on water line 1 from approx. STA. 11+48 to approx. STA. 11+88. The line was being backfilled in lifts. The trench was opened up over 48" wide and KC Testing was on site to perform compaction testing.

Corrective action required:

2 Brice Lawson 11/10/2017 2:57 PM

Redford installed 40' of 8" C900 water line on water line 1 from STA 3+25 to STA. 3+65. Tracer wire and bury tape have been installed with this water line.

Corrective action required:

3 Brice Lawson 11/13/2017 11:47 AM

Redford installed the 8" C900 water line with tracer wire for water line 1 from approx. STA. 0+29.17 to STA. 1+39.99. The Tee fitting has been installed at STA. 1+39.99.

Corrective action required:

4 Brice Lawson 11/13/2017 2:46 PM

Redford installed the 8" gate valve on line 2 near STA. 0+00. Approx. 74' of C900 water line has been installed from STA. 0+00 to approx. STA. 0+74. Tracer wire has been installed with this pipe and utility marker tape is being installed in the trench. Two vertical 45 degree bend fittings have been installed with rebar loops around the fittings. The rebar loops have been installed in a thrust block below the 45 degree fittings. KC Testing is on site to observe compaction testing for the water line. The DI fittings have been wrapped in 12 mil poly wrap and the T bolts have been sprayed with an undercoating.

A thrust block has been installed on the 45 degree bend fitting on line 1 at STA.0+95.15.

MCIB WA610 concrete was used for the thrust blocks.

Corrective action required:

5 Brice Lawson 11/14/2017 1:23 PM

Redford installed an 8" Clow gate valve just west of the Tee fitting located at STA. 0+00 on water line 2. A 1' piece of C900 was installed between the valve and the tee fitting. A thrust block has been installed on the tee fitting. A tracer wire has been installed over to the tee fitting.

Pending

DEI-Sanitary Sewer - Vacuum Brice Lawson Corrective action required:

1 Brice Lawson 11/14/2017 6:45 AM On 11-9-17 Bryan Byrd witnessed vacuum testin on the following manholes:

MH A-5 - Test Passed

MH A-6 - Test Passed

MH B-1 - Test Passed

MH B-2 - Test Passed

MH B-3 - Test Passed

Corrective action required:

2 Brice Lawson 11/20/2017 12:30 PM Redford vacuum tested the following manholes:

> MH E-1 Start test 10" mercury End test 9.75" mercury

Test Duration 2.5 min Test passed

MH C-1 Start test 10" mercury End test 10" mercury Test Duration 3:00 Test passed

MH C-2 Start test 10" mercury End test 9.75" mercury Test Duration 2:30 Test passed

DEI-Sanitary Sewer - Air Test Brice Lawson Corrective action required:

> Brice Lawson 11/14/2017 6:52 AM On 11-9-17 Bryan Byrd witnessed air testing on the following sanitary sewer line segments.

Pending

MH B-1 to MH B-2 Test Passed

MH B-2 to MH B-3 Test Passed

Corrective action required:

1

2 Brice Lawson 11/20/2017 12:24 PM Redford performed air testing on the following line segements:

Cherne Gauge Cal. Date 10/31/17

MH E-1 to MH B-3 Start press. 3.9 psi End press. 3.85 psi Test Duration 7:34 Test Passed

MH B-3 to MH C-1 Start press 3.65 psi End press 3.5 psi Test Duration 23:01 Test passed

**DE-Calculate Permit Fee** 

Complete

Licensed	Contractors		Approved	Tuesday, July 18, 2017
Verify Ap	proval Letter		Complete	Tuesday, May 30, 2017
DE-Perm Contracte	it signed by or	Mitch Plemmons	Complete	Tuesday, July 18, 2017
DE-Verify	v Other Permits	Mitch Plemmons	Complete	Tuesday, July 18, 2017
DEI-Erosi (ESC) Insj	on Sediment Control pection	Brice Lawson	Failed	Monday, August 07, 2017
Correctiv 1	re action required: Brice Lawson 08/07/ Repair the west cons	2017 3:15 PM truction entrance as part of i	t has washed out.	
	Add larger rock to th detail.	e construction entrances as s	shown on the construction e	entrance
	Remove debris that I	nas been tracked onto Count	y Line Rd.	
DEI-Site V	/isit	Mitch Plemmons	Complete	Monday, July 31, 2017
DEI-ESC [	Devices Installed		Pending	
DE-Perm Contracto	it signed by or	Mitch Plemmons	Complete	Tuesday, August 01, 2017

Inspectio	cellaneous PWORKS on	Mitch Plemmons	Partial	Tuesday, August 01, 2017
	tary Sewer ction Inspection	Mitch Plemmons	Partial	Tuesday, August 01, 2017
	tary Sewer ction Inspection	Brice Lawson	Partial	Thursday, August 03, 2017
Correcti 1	ve action required: Brice Lawson 08/03 A revision for the sa Redford Constructio	nitary line A has been appro	ved. I delivered a revised sh	eet C.402 to
		that parts of the sanitary wi his was brought up to Gene.	ll be slightly deeper than 15'	. Mitch
	tary Sewer ction Inspection	Brice Lawson	Partial	Thursday,
				August 03, 2017
	ve action required: Brice Lawson 08/03 Redford Constructic sewer pipe. They pla	on had the existing manhole an to fence off this excavate	#60-082 core drilled to recei d pit tonight as it is getting la erm around the pit to contro	2017 ive the 15" ate. They plan
Correcti 1 DEI-Sani	ve action required: Brice Lawson 08/03 Redford Constructic sewer pipe. They pla	on had the existing manhole an to fence off this excavate	d pit tonight as it is getting la	2017 ive the 15" ate. They plan

DEI-Erosion Sediment Control Brice Lawson (ESC) Inspection

Partial

Wednesday, August 09, 2017

Corrective action required:

1 Brice Lawson 08/07/2017 3:15 PM

Repair the west construction entrance as part of it has washed out.

Add larger rock to the construction entrances as shown on the construction entrance detail.

Brice Lawson 08/09/2017 2:44 PM

The west construction entrance has been rebuilt.

Remove debris that has been tracked onto County Line Rd. Brice Lawson 08/09/2017 2:44 PM The debris has been removed from the road

Corrective action required:

2 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to control erosion.

	itary Sewer ction Inspection	Brice Lawson	Partial	Wednesday, August 09, 2017
Correct	ive action required:			
1	Brice Lawson 08/09	/2017 3:34 PM		
		• • •		A-1 towards MH A-2. It at the backfill was being
DEI-Inst Signs	all Street and Stop	Brice Lawson	Partial	Wednesday, August 09, 2017
Correct	ive action required:			
1	Brice Lawson 08/09	/2017 7:56 AM		
	Replace the red end SW Stoney Creek Dr	l of pavement marker sig	gns that were removed	l on SW Georgetown at
DEI-Gra	ding/Excavation/Fill	Brice Lawson	Partial	Wednesday,

Inspection

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Thursday,
Inspection			August 17,
			2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

DEI-Erosion Sediment Control Brice Lawson	Failed	Friday,
(ESC) Inspection		August 18,
		2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to control erosion.

Corrective action required:

2 Brice Lawson 08/18/2017 2:22 PM

Repair the construction entrance on SW Merrymen Dr. There are low spots and mud is being tracked onto Merryman Dr.

Remove the debris that is being tracked onto Merryman Dr.

DEI-Sanitary Sewer	Tom Chandler	Partial	Tuesday,
Construction Inspection			August 15,

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August 09, 2017

Friday

DEI-Sanitary Sewer Construction Inspection	Tom Chandler	Partial	Tuesday, August 15, 2017
Corrective action required 1 Tom Chandler 08 towards MH A-3	3/15/2017 12:29 PM Insta	lled Sanitary sewer main	15" SDR 26 heading
DEI-Sanitary Sewer Construction Inspection	Tom Chandler	Partial	Tuesday, August 15, 2017
	l: R 26 Sanitary sewer main butyl joint and wrap as w	•	
DEI-Sanitary Sewer Construction Inspection	Tom Chandler	Partial	Tuesday, August 15, 2017
-	l: of pipe out of MH A-2. Bac L and MH A-2. Contractor	•	•
DEI-Sanitary Sewer Construction Inspection	Tom Chandler	Partial	Tuesday, August 15, 2017
Installed MH A-3	3/15/2017 3:50 PM Install base and barrell section. rell. Installed wye for lot 6	Installed butyl joint and v	wrap as well. Was back
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Wednesday, August 16, 2017
220 SE Green Street	Lee's Summit, MO 64063   816.96	9.1200   816.969.1201 Fax   <u>cityo</u>	fLS.net/Development

Corrective action required:

Tom Chandler 08/15/2017 7:13 AM Redford has installed MHA-2 and approximately 20 ft 1 of 15" SDR 26 sanitary main. They dug up existing sanitary line under roadway to check elevaions as well.

Corrective action required:

1 Brice Lawson 08/16/2017 4:30 PM

Redford installed approx.135' of 15" SDR 26 from MH A-3 towards MH A-4. They installed the wyes for lots 63 and 85. It appeared that the pipe was being properly bedded in clean gravel.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			August 17,
			2017

Corrective action required:

Brice Lawson 08/17/2017 10:22 AM
 Redford continued installing the 15" SDR 26 between MH A-3 towards MH A-4. They installed the wyes with anodes for lots 64, 86 and 87. They were backfilling part of this main.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Thursday,
Inspection			August 17,
			2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM Spalding began stockpiling large rock and dirt west of the temporary sediment basin.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			August 17,
			2017

Corrective action required:

1 Brice Lawson 08/17/2017 3:24 PM

Redford continued installing the 15" SDR 26 between MH A-3 and MH A-4. They connected this pipe to the existing 15" SDR 26 pipe that was previously installed under Stoney Creek Dr. They made these connections with two Strong Back Ferncos. They installed the wye with an anode for lot 65.

MH A-1 appears to be 17.5' from top of lid to the FL Out. The plans show this to be at 15'. I brought this to Gene Williams attention and he thought it would fine. I let him know that the pipe would be over 15' deep in this location and he thought it would be fine.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Friday,
Inspection			August 18,
			2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 08/18/2017 2:16 PM

Spalding was installing a fill what appeared to be lots 68 thru 59. It appeared that the fill was being installed in lifts and compacted with a sheepsfoot. They were excavating a cut along lots 77 thru 81 and along the future Amethyst Dr.

DEI-Sanitary Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			August 18,
			2017

Corrective action required:

1Brice Lawson 08/18/2017 11:56 AMRedford installed the MH frame and lid and wrapped the frame on MH A-2 and MH A-3.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			August 21,
			2017

Corrective action required:

1Brice Lawson 08/21/2017 11:08 AMRedford installed the base and barrell section for MH A-4. They tied this MH to the existing

15" SDR 26 sewer pipe that was previously installed and crossed SW Stoney Creek Dr. The base was set on a bed of bedding rock. DEI-Sanitary Sewer - Invert Partial Brice Lawson Friday, August 18, 2017 Corrective action required: 1 Brice Lawson 08/18/2017 12:02 PM Redford installed the inverts in Manholes: A-1, A-2, A-3 and U-1. They appear to be smooth troweled and built up on the sides 1/2 the diameter of the pipe. DE-Deliver plans to contractor Mitch Plemmons Complete Tuesday, July 18, 2017 **DE-Collect Public Works Fees** Complete Tuesday, May 30, 2017 Partial DEI-Grading/Excavation/Fill Brice Lawson Thursday, August 31, Inspection 2017 Corrective action required: 1 Brice Lawson 08/09/2017 2:45 PM Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location. Corrective action required: 2 Brice Lawson 08/17/2017 10:02 AM Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary

sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 08/18/2017 2:16 PM

Spalding was installing a fill what appeared to be lots 68 thru 59. It appeared that the fill was being installed in lifts and compacted with a sheepsfoot. They were excavating a cut along lots 77 thru 81 and along the future Amethyst Dr.

Corrective action required:

5 Brice Lawson 08/31/2017 10:16 AM

Spalding was performing a cut for Merryman Dr. at the east end near the tie in to existing pavement. They were continuing to grade, fill and compact various areas of the site that appear to be outside the ROW. No grade stakes were present.

Redford performed major grading on the east side of SW Stoney Creek Dr. of the ground that was disturbed during the installation of the sanitary sewer and stub lines thus far. Three swales were installed to allow water to properly drain until phase three is constructed. A earth berm was installed upstream of MH A-3 to minimize the amount of water draining across this manhole lid until phase three is constructed. It appears that this area will drain.

There is a temporary drain pipe located on the east side of SW Stoney Creek Dr. that runs north and south approx. 27' from the edge of asphalt pavement. I asked Darrin to install some large rock ahead of the inlet side of this pipe to continue to drain this ground as it has until phase 3 is competed.

DEI-Erosion Sediment Control Brice Lawson	Partial	Monday,
(ESC) Inspection		August 21,
		2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to control erosion.

Corrective action required:

2 Brice Lawson 08/18/2017 2:22 PM

Repair the construction entrance on SW Merrymen Dr. There are low spots and mud is being tracked onto Merryman Dr.

Remove the debris that is being tracked onto Merryman Dr.

Brice Lawson 08/21/2017 3:30 PM The above issues have been resolved.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			August 23,

2017

Corrective action required:

1 Brice Lawson 08/23/2017 9:43 AM Redford is installing the 4" SDR 26 sewer stub for lot 85. It appears that the tracer wire is being installed and the pipe is being bedded in rock. They said the stub is being set at a 2% slope.

<b>DEI-Detention</b>	Basin
	Dusin

Brice Lawson

Partial

Monday, August 21, 2017

Corrective action required:

1 Brice Lawson 08/21/2017 3:23 PM

Redford installed the 3" Faircloth Skimmer in the temparary sediment basin #1. A 2" by 8' schedule 40 pvc barrel was installed. 4" schedule 40 pvc discharge pipe was installed through the dam and daylights approx. 2' north of the toe of the dam slope. Large rock was installed where the pipe daylights.

I called Matt with Engineering Solutions to get some information about the rock check, rip rap and length of discharge pipe.

DEI-Erosion Sediment Control Brice Lawson	Failed	Wednesday,
(ESC) Inspection		August 23,
		2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to control erosion.

Corrective action required:

2 Brice Lawson 08/18/2017 2:22 PM

Repair the construction entrance on SW Merrymen Dr. There are low spots and mud is being tracked onto Merryman Dr.

Remove the debris that is being tracked onto Merryman Dr.

Brice Lawson 08/21/2017 3:30 PM

The above issues have been resolved.

Corrective action required:

3 Brice Lawson 08/23/2017 9:45 AM

Repair or perform mantenance to the silt fence on the east side of Stoney Creek Dr where it is leaning and the silt is built up on the fence. Possibly add more silt fence above this to control erosion. Add ESC devices below MH A-2 where there is no erosion control.

DEI-Site '	Visit	Tom Chandler	Complete	Wednesday, August 23, 2017
Correctiv 1	ve action required: Tom Chandler 08/23 overnight.	/2017 7:07 AM No work goir	ng on today because of the 6	5" rain
Construc	ary Sewer tion Inspection	Brice Lawson	Partial	Wednesday, August 23, 2017
Correctiv 1	/e action required: Brice Lawson 08/23/	/2∩17 12·47 DN4		
I	Redford installed the wire. The tracer wire were being partially	e sewer stubs for lot 62 and 8 e is being wrapped around a p backfilled. It appears that the es are not being installed at th	post just above grade. These e fill was being installed and	e trenches
DEI-Erosi (ESC) Ins	ion Sediment Control pection	Brice Lawson	Failed	Wednesday, August 23, 2017
	ve action required:			
1		2017 2:50 PM lling silt fence on the east sid ire not shown on the plans.	e of the project to control e	rosion. This
	Spalding plans to ins control erosion.	tall a mulch berm upstream	of the west construction ent	rance to
	ve action required:			
<ul> <li>Brice Lawson 08/23/2017 9:45 AM</li> <li>Repair or perform mantenance to the silt fence on the east side of Stoney Creek Dr where it is leaning and the silt is built up on the fence. Possibly add more silt fence above this to control erosion. Add ESC devices below MH A-2 where there is no erosion control.</li> </ul>			above this to	
	ve action required:			
3	•	silt fence located near the tent ing. It appears that silt is leav		as been
	-Make necessary rep	pairs to make the silt fence ef	fective	

-Add ESC devices to the east end of the silt fence below the temporary sediment basins where there is no control of erosion.

DEI-Sanitary Sewer	Brice Lawson	Partial
Construction Inspection		

Corrective action required:

1 Brice Lawson 08/23/2017 3:53 PM

Redford installed the sewer stub for lot 84. The tracer wire was installed along the top of the stub.

Wednesday, August 23, 2017

The trench checks were installed for lot 84, lot 62 and lot 85.

DEI-Erosion Sediment Control Brice Lawson	Partial	Thursday,
(ESC) Inspection		August 24,
		2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to control erosion.

Corrective action required:

2 Brice Lawson 08/23/2017 9:45 AM

Repair or perform mantenance to the silt fence on the east side of Stoney Creek Dr where it is leaning and the silt is built up on the fence. Possibly add more silt fence above this to control erosion. Add ESC devices below MH A-2 where there is no erosion control.

Brice Lawson 08/24/2017 9:00 AM - RESOLVED

Sections of silt fence have been added above the original silt fence east of SW Stoney Creek Dr. A section of silt fence has been installed below MH A-2. Some of the silt that was built up in front of the original silt has been removed.

Corrective action required:

3 Brice Lawson 08/23/2017 1:23 PM

The north perimeter silt fence located near the temporary sediment basin has been damaged and is leaning. It appears that silt is leaving the site.

-Make necessary repairs to make the silt fence effective

-Add ESC devices to the east end of the silt fence below the temporary sediment basins where there is no control of erosion.

DEI-Sanitary Sewer	Brice Lawson	Failed	Thursday,
220 SE Green Street	Lee's Summit, MO 64063   816.96	9.1200   816.969.1201 Fax   city	of S.net/Development

#### **Construction Inspection**

August 24, 2017

Corrective action required:

1 Brice Lawson 08/24/2017 4:17 PM

Redford backfilled the road crossing trenches for the sanitary stubs for lots 84, 85 and 62. It appeared that the backfill was being installed and compacted in lifts. Mike with KC Testing was on site to perform compaction tests on the lifts. He was performing a visual inspection on the initial backfill for these trenches up to a point in elevation where it was safe for him to perform moisture/desity testing.

The compaction tests for the stub on lot 62 were taken near the connection to the main. These tests are for the compaction tests required for the main.

Darrin let me know that the compaction tests for lot 85 trench passed. Mike let me know that some of the compaction tests for lot 84 were below 95%.

This trench must be excavated and properly compacted through the road crossing and achieve passing moisture/desity testing.

DEI-Erosion Sediment Control Brice Lawson	n Partial	Friday,
(ESC) Inspection		September
		08, 2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to control erosion.

Corrective action required:

2 Brice Lawson 08/23/2017 1:23 PM

The north perimeter silt fence located near the temporary sediment basin has been damaged and is leaning. It appears that silt is leaving the site.

-Make necessary repairs to make the silt fence effective

-Add ESC devices to the east end of the silt fence below the temporary sediment basins where there is no control of erosion.

Corrective action required:

3 Brice Lawson 09/08/2017 12:49 PM

Redford installed large rock surrounding the field inlet located just west of the west construction entrance. This was done to help with a washout area near the inlet.

	tary Sewer ction Inspection	Brice Lawson	Partial	Thursday, August 24, 2017
Correctiv 1		/2017 4:37 PM e 15" SDR 26 sanitary main fi r lots 66,67,88, and 89. The r		8+40. The
Construc	tary Sewer ction Inspection	Brice Lawson	Partial	Friday, August 25, 2017
Correction 1	wye fittings for lots	/2017 1:28 PM aying the 15" SDR 26 sanitar 68 and 90 have been installe k and appeared to be bedded	d with the anodes. The pipe	
	tary Sewer ction Inspection	Brice Lawson	Partial	Friday, August 25, 2017
Correctiv 1	to approx. STA. 9+40	/2017 3:42 PM nstalling the 15" SDR 26 sani D. The wyes and anodes were ed for lot 86. The tracer wire	installed for the stubs for lo	ots 69 and 91.
	a visual inspection o	te performing a visual inspec f the backfill under the futur contractor was backfilling wit	e road. It appeared that the	trench was
	tary Sewer ction Inspection	Brice Lawson	Partial	Monday, August 28, 2017
Correctiv 1		/2017 9:33 AM e sanitary stub for lot 63. The d at grade. The stub has beer		led and
	Redford continues t	o install the 15" sanitary mai	n between MH A-4 and A-5.	

	tary Sewer ction Inspection	Brice Lawson	Partial	Monday, August 28, 2017
Correctiv 1		2017 12:55 PM e sanitary stubs with tracer v vrapped around a post at gra		
	They installed the w	ye fittings for lots 70 and 92.		
	tary Sewer - Air Test	Brice Lawson	Partial	Tuesday, October 31, 2017
Correctiv 1	completed it was de	2017 3:00 PM a pressure test on Line U from termined that the contractor rk was for the gauge that wa	r could not verify that the pr	
	-	ng to get a different gauge c goes with calibration verific	-	ber for the
DEI-Sani	tary Sewer - Vacuum	Brice Lawson	Partial	Tuesday, October 31, 2017
Correctiv 1	ve action required: Brice Lawson 10/31/ Redford attempted t appeared to be a lea	to perform a vacuum test on	MH U-1. The test never beg	an as there
DEI-Wat Inspectio	er Line - Construction on	Brice Lawson	Partial	Wednesday, October 25, 2017
Correctiv 1	main that runs along corner of this site. T	2017 10:47 AM Dept. performed a test wate the north edge of SW Coun his shut down was done in pr revised sanitary line D plans.	ty Line Rd. This is near the so	12" water outhwest

The existing valves appeared to work for this shut down.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			August 28,

Corrective action required:

1 Brice Lawson 08/28/2017 3:32 PM

Redford installed the flowfill trench checks on the sanitary sewer stubs for lots 63,64,65,86 and 87. They appeared to be the correct size and appeared to be at least 5' from the main.

2017

MH A-5 base and barrell section have been installed. The joint between the two has been wrapped with butyl joint wrap. This MH was shifted approx. 1.5' to the east due to the legth of the incoming pipe. I checked with Gene to make sure this would be ok.

They were installing the stub for lot when I left. The pipe was being bedded in clean gravel and the tracer wire was being installed and taped to the pipe.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			August 29,
			2017

Corrective action required:

1 Brice Lawson 08/29/2017 10:51 AM

Redford installed the stub for lot 87. The tracer wire is wrapped around a post at grade. I saw part of this stub being installed on 8/28 and it was being bedded in gravel and the tracer wire was being taped to the pipe.

They are working on backfilling the trenches for lots 63, 64,65 86 and 87. It appeared that the fill was being place and compacted in lifts with a track hoe bucket.

Darrin informed me that there is a conflict with the FL out elevation shown on the plans for MH A-5. The FL out on sheet 402 is 979.74 and on sheet 403 the FL out is 981.6. The FL in are in conflict as well. Darrin called Eng. Solutions and they are suppose to be on site after lunch to discuss.

DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Failed	Tuesday, August 29, 2017
Corrective action required:			2017

1Brice Lawson 08/29/2017 2:32 PMRedford confirmed that the elevation of the 15" sewer main FL out is .3' too high. This leads

me to believe that the section of 15" sewer main between MH A-4 and MH A-5 exceeds the allowable 0.1' of tollerance in grade. This section of pipe must be removed and replaced.

Brice Lawson 11/14/2017 6:34 AM This issue has been resolved.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			August 29,
			2017

Corrective action required:

1 Brice Lawson 08/29/2017 3:05 PM

Redford installed the sewer stubs for lots 66,67 and 88. It appeared the pipes were being bedded properly in clean rock. The tracer wires have been installed and are wrapped around a post at grade. Redford confirmed the slopes of the stubs to be a 2%.

They partially backfilled the stub trench for lot 88. They were digging up the stub trenches for lots 82 and lot 84 to perform moisture/density testing of the backfill at the road crossing. It appeared that the fill was being placed and compacted in lifts. KC Testing is on site to perform the testing.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			August 30,
			2017

Corrective action required:

1 Brice Lawson 08/30/2017 10:27 AM

I met with Travis Ruff, Matt Schlicht and Thomas Hudgens to go over the sanitary plans regarding MH A-5 and the main line segmetn between MH A-4 and MH A-5. This segment has been installed .3' too high in elevation. Matt plans to submit a revised plan to the City that reflects this change in elevation and slope.

Redford bacfilled and had compaction tests performed on the road crossing for the sanitary stubs for lots 83 and 87 yesterday.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			August 31,
			2017

Corrective action required:

- 1
- Brice Lawson 08/31/2017 10:42 AM

Redford installed the trench checks on the sewer stubs for lots 66,67, and 88. Flow fill was used for these checks.

The stub for lot 89 was partially installed. The tracer wire was being installed and taped to the stub.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Friday,
Inspection			September
			01, 2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			August 31,
			2017

Corrective action required:

1 Brice Lawson 08/31/2017 4:40 PM

Redford installed the sanitary sewer stubs for lots 89, 90, 68, 69 and 70. The tracer wire was installed and the pipe was embeded in clean rock. 4" SDR 26 pipe was used for these stubs. The tracer wires are wrapped around a post at grade. The trench checks were installed using flowable fill.

DEI-Sanitary Sewer	Brice Lawson	Failed	Thursday,
Construction Inspection			August 31,

Corrective action required:

green paint.

1Brice Lawson 08/31/2017 4:44 PMThe entire tops of the sanitary manhole lids A-1, A-2, A-3 and U-1 have been painted with

Remove the paint from the lids.

DEI-Sanitary Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			September
			01, 2017

Corrective action required:

1 Brice Lawson 09/01/2017 10:22 AM

Redford backfilled the sanitary stub road crossings for lots 88 and 89. KC Testing observed this backfill and performed density testing on the backfill. They said that density testing of the trench backfill was performed on Line A at STA. 6+00 and STA. 9+00. Darrin confirmed that these trenches were excavated over 4' in width prior to the backfill being placed.

The manhole frame, cover and 2-6" concrete adjustment rings were installed on MH A-4. The measurement from the top of the frame to the FL out is approx. 15.1'.

The sewer main trench has been backfilled from MH A-4 to approx. STA. 9+15

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			05, 2017

Corrective action required:

1 Brice Lawson 09/05/2017 10:52 AM

Redford installed approx. 30' of 15" SDR 26 sewer pipe. They installed the service wyes for lots 71 and 93. The anodes were installed in the bedding rock where the wye is connected to the sewer main. The sewer main is being bedded in clean gravel. A trench box is being used during pipe installation.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Tuesday,
Inspection			September
			05, 2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Corrective action required:

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			05, 2017

Corrective action required:

1 Brice Lawson 09/05/2017 3:17 PM

Redford continued installing the 15" sanitary main from MH A-5 toward MH A-6. The service wyes and anodes for lots 72 and 94 have been installed. It appeared that the pipe was being bedded in clean gravel. It appeared that there was 6" of clearance between the trench walls and the O/D of the pipe.

Redford continues to remove the excess dirt that is left over after the sanitary mains were installed east of SW Stoney Creek Dr.

DEI-Grading/Excavation/Fill	Tom Chandler	Partial	Friday,
Inspection			September
			15, 2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the

detention basin and he plans to build it after the cut is made in that location. Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Corrective action required:

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

Corrective action required:

6 Tom Chandler 09/15/2017 11:11 AM Backfill on sanitary sewer main being placed today. No testing has been done today. If testing lab can make it to site today they will backfill (3) roadway crossings.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			September
			06, 2017

Corrective action required:

1 Brice Lawson 09/06/2017 10:25 AM

Redford continues to install the 15" SDR 26 sewer main between MH A-5 and MH A-6. This main has been installed up to approx. STA 12+32. The service wyes and anodes have been installed for lots 73 and 95. The pipe is being bedded in clean rock. It appears that 6" of clearance from O/D of pipe to trench wall is being achieved.

DEI-Sanitary - Material Verification	Brice Lawson	Failed	Wednesday, September 06, 2017
Corrective action required:			,

1 Brice Lawson 09/06/2017 12:35 PM

The concrete flat top lid for manhole D-1 is not equipped with a cast in place manhole ring and cover.

A detail for this flat top lid is shown on the details page for these plans.

Replace this lid to meet spec.

Brice Lawson 11/14/2017 6:35 AM The use of the flat top lid has been approved by City staff.

DEI-Sanitary - Material	Brice Lawson	Partial	Wednesday,
Verification			September
			13, 2017

Corrective action required:

1 Brice Lawson 09/13/2017 3:51 PM

Some of the sanitary manholes for lines A, B and C are on site and stock piled on the east side of Amethyst Dr. The manholes have A-Lock gaskets and appear to be coated with a bituminous black coating. The steps that I could see meet the City's spec. The lids and frames appear to meet the City's spec. The 4" and 6" concrete adjustment rings are tongue and groove.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			September
			06, 2017

Corrective action required:

1 Brice Lawson 09/06/2017 4:15 PM

Redford continued installing the 15" SDR 26 sewer main from MH A-5 towards MH A-6. The main was installed up to approx. STA. 13+00. The pipe was being bedded in clean gravel. It appeared that there was 6" clearance from the pipe O/D to the trench walls. The service wye and anode have been installed for lot 74.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			September
			07, 2017

Corrective action required:

1 Brice Lawson 09/07/2017 11:52 AM

Redford has installed the 4" sewer stubs for lots 71, 72, 73, and 91. The areas have been excavated for the trench checks. The tracer wire has been installed. The pipes have been bedded in clean gravel.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			September
			07, 2017

Corrective action required:

1 Brice Lawson 09/07/2017 3:53 PM

Redford installed the sewer stub for lots 92 and 93. The tracer wire has been installed and the pipe was bedded in clean gravel. The trench checks have been installed on the service laterals for lots 71, 72, 73, 74, 92 and 93. The laterals for lots 92 and 93 have been partially backfilled.

DEI-Sanitary Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			September
			08, 2017

Corrective action required:

1 Brice Lawson 09/08/2017 12:26 PM

Redford backfilled the sewer stub road crossings for lots 91, 92 and 93. KC Testing was on site to perform backfill observation and desity testing on these lines. The sewer main has been backfilled up to approx. STA. 11+35.

They installed the cone section, 4" adjustment ring, LS101A frame and LS 101B lid on MH A-5. This was completed and backfilled before I saw the wrap on the joints.

	tary Sewer tion Inspection	Brice Lawson	Partial	Monday, September 11, 2017
Correctiv	ve action required:			
1	Brice Lawson 09/11/	/2017 10:47 AM		
		d 28' of 15" SDR 26 from app d in clean gravel. It appears t		

of the pipe to the trench walls. They are excavating the trench for the service stub for lot 94.

DEI-Erosion Sediment Control Brice Lawson	Failed	Monday,
(ESC) Inspection		October 30,
		2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:50 PM

Welch was out installing silt fence on the east side of the project to control erosion. This includes areas that are not shown on the plans.

Spalding plans to install a mulch berm upstream of the west construction entrance to

control erosion.

Corrective action required:

2 Brice Lawson 08/23/2017 1:23 PM

The north perimeter silt fence located near the temporary sediment basin has been damaged and is leaning. It appears that silt is leaving the site.

-Make necessary repairs to make the silt fence effective

-Add ESC devices to the east end of the silt fence below the temporary sediment basins where there is no control of erosion.

Corrective action required:

3 Brice Lawson 09/08/2017 12:49 PM

Redford installed large rock surrounding the field inlet located just west of the west construction entrance. This was done to help with a washout area near the inlet.

Corrective action required:

4 Brice Lawson 10/30/2017 11:45 AM

Add rock checks to the temporary swales that are located east of temporary sediment basin #1. RESOLVED

Grade these temporary swales so that the slopes can be properly vegetated. RESOLVED

Add ESC devices as shown on the plans in and around the temp. sediment basin #1 and the swale that drains into this basin.

Repair or replace the damaged or innefective ESC devices that have been installed around the storm structures.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			September
			11, 2017

Corrective action required:

1 Brice Lawson 09/11/2017 3:37 PM

Redford installed the wyes and anodes for building lots 75 and 96. They continued installing the 15" SDR 26 sewer main up to approx. STA. 13+72. The pipes were being bedded in clean rock. They have encountered a rock shelf in the sewer main trench that is being broken up with a stinger and removed from the trench. There is a shelf of softer stone that is being removed with the hoe bucket.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			12, 2017
Corrective action required:			

1 Brice Lawson 09/12/2017 10:00 AM

Redford has installed the 4" sanitary sewer stub for lot 94. The tracer wire has been installed. The pipe was bedded in clean gravel. The contractor says the stubs are being installed at a 2% slope. They installed approx. 24' of 15" SDR 26 up to approx. STA. 13+95. The main is being bedded in clean gravel.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			12, 2017

Corrective action required:

Brice Lawson 09/12/2017 3:08 PM
 Redford installed approx. 28' of the 15 SDR 26 sanitary main up to approx. STA. 14+23. The pipe was bedded in clean rock. They are removing rock that has been encountered while digging the trench. They are working on installing the 4" SDR 26 service stub for lot 96.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			September
			13. 2017

Corrective action required:

1 Brice Lawson 09/13/2017 12:38 PM

Redford installed the 4" service stub for lot 95. The pipe was covered with clean gravel when I arrived. The pipe has been covered in clean rock. It appears that a tracer wire was ran with the pipe. The end of the tracer wire was brought up to grade.

They continue to install the 15" SDR 26 sewer pipe from approx. STA. 14+24 to approx. STA. 14+58.5. The pipe is being bedded in clean gravel. The service wye and anode for lot 76 has been installed. The base and barrell sections for MH A-6 have been installed. The barrells were partially backfilled when I arrived. The joints have been wrapped and the contractor stated that mastic was installed between the pipe sections.

DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Wednesday, September 13, 2017
Corrective action required:			
1 Brice Lawson 09/1	3/2017 3:22 PM		
Redford installed the trench checks on the service stubs for lots 94, 95, 96, and appeared to be built with flowfill material. The 15" SDR 26 sewer main has been up to approx. STA. 14+86. The pipe was being bedded in clean gravel.			nain has been installed
DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
220 SE Groop Street   Lo	o's Summit MO 64062   816 06	50 1200   816 060 1201 Eax   city	of S not/Dovelonment

Construction Inspection			September 14, 2017		
Corrective action required: 1 Brice Lawson 09/14/2017 12:17 PM Redford continues to install the 15" SDR 26 sewer pipe between MH A-6 and MH A-7. The pipe is being bedded in clean rock. The sewer stub for lot 76 has been installed with a tracer wire and trench check.					
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Thursday, September 14, 2017		
	installing the 15" SDR ded in clean rock. The	26 sanitary pipe up to app encountered a rock shelg			
The sewer stub for rock.	lot 96 was installed wi	th a tracer wire. The pipe	was bedded in clean		
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Monday, September 18, 2017		
Corrective action required: 1 Brice Lawson 09/18/2017 8:40 AM Redford continues to install the 15" SDR sanitary main between MH A-6 and MH A-7.					
DEI-Grading/Excavation/Fill Inspection	Brice Lawson	Partial	Wednesday, September 27, 2017		
Corrective action required: 1 Brice Lawson 08/09/2017 2:45 PM Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.					
<ul> <li>Corrective action required:</li> <li>Brice Lawson 08/17/2017 10:02 AM</li> <li>Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.</li> </ul>					
Corrective action required:					

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Corrective action required:

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

Corrective action required:

6 Tom Chandler 09/15/2017 11:11 AM Backfill on sanitary sewer main being placed today. No testing has been done today. If testing lab can make it to site today they will backfill (3) roadway crossings.

Corrective action required:

7 Brice Lawson 09/27/2017 11:33 AM

I informed Mike with KC Testing, Thomas Hudgens and Darrin that the compaction test reports for the sanitary trenches that have been submitted so far do not have documentation for a visual inspection of the initial backfill that is being placed in the trenches. KC Testing will not perform moisture density testing of trenches that are too deep due to safety reasons. I informed them that the City will need documentation of visual inspections of the backfill of the sanitary trenched up to the point where KC Testing can perform the moisture density testing.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			September
			18, 2017

Corrective action required:

1 Brice Lawson 09/18/2017 3:40 PM

Redford installed the manhole base for manhole A-7. They installed the remainder of the 15" sewer main pipe between MH A-6 and MH A-7. They installed the cone section and frame and lid on MH A-6.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			19, 2017

Corrective action required:
- 1
- Brice Lawson 09/19/2017 12:02 PM

Redford has installed manhole base B-1. They installed the 12" SDR 26 from MH A-7 to MH B-1. The pipe is being bedded in clean rock.

	itary Sewer ction Inspection	Brice Lawson	Partial	Wednesday, September 20. 2017		
Correcti 1	20, 2017 Corrective action required: 1 Brice Lawson 09/20/2017 11:38 AM Redford has installing the 12" SDR 26 sewer pipe from MH B-1 up to approx. STA. 2+07.84. The pipe is being bedded in clean rock. They installed the wye, stub and anode for the stub for lot 99. They installed the wyes and anodes for lots 97, 81, 75 and 98.					
	itary Sewer ction Inspection	Brice Lawson	Partial	Wednesday, September 20, 2017		
Correcti 1	Corrective action required:					
	itary Sewer ction Inspection	Brice Lawson	Partial	Thursday, September 21, 2017		
<ul> <li>Corrective action required:</li> <li>Brice Lawson 09/21/2017 11:35 AM Redford installed the cone section on MH B-1 with wrap. They installed the barrell and cone section for MH A-7 with wrap. They installed the trench checks on the stubs for lots 97, 99, 98 and 75. They installed the stub, anode and tracer wire on lot 97. The pipes were bedded in clean gravel.</li> </ul>						
Constru	tary Sewer ction Inspection	Brice Lawson	Partial	Friday, September 22, 2017		
Correcti 1	STA. 3+03. The main	/2017 12:10 PM d the 12" SDR 26 sewer mair n is being bedded in clean roo The contractor is breaking a	ck. There is a rock ledge show	wing in the		

The stub, trench check, wye, anode and tracer wire have been installed for lot 80. The stub and trench check have been installed for lot 81. The service wye and anode have been installed for lot 74. The stub for lot 80 was bedded in clean rock. The trench walls of the stub for lot 80 show a shelf of rock running approx. 4' thick.

The sewer main has been backfilled from approx. STA. 16+35 to MH A-7.

The sewer main has been partially backfilled between MH A-7 and MH B-1.

The sewer main has been backfilled from MH A-7 to approx. STA. 2+50.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			September
			25, 2017

Corrective action required:

1 Brice Lawson 09/25/2017 11:55 AM

Redford has installed the 12" SDR 26 sewer main between B-1 and B-2 up to approx. STA. 4+03. The pipe that I saw was being bedded in clean rock. The wye fitting and anode and part of the 4" SDR 26 stub have been installed for lot 79. The wye fitting, stub and tracer wire have been installed for lot 74, The Wye fitting, stub, anode and trench check have been installed for lot 73. The pipes that I saw were being bedded in clean rock.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			September
			25, 2017

Corrective action required:

1 Brice Lawson 09/25/2017 3:46 PM

Redford installed the remainder of the 4" sanitary sewer stub for lot 79. The base and barrell for MH B-2 have been installed. The remainder of the 12" SDR 26 sewer pipe between MH B-1 and B-2 was installed into MH B-2.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			26, 2017

Corrective action required:

Brice Lawson 09/26/2017 11:49 AM
 Redford has installed the 2nd barrell section for MH B-2. They have installed the 12" SDR
 26 sewer pipe from MH B-2 up to approx. STA. 4+59. The 12" pipe that was not covered was being bedded in clean gravel. The wye fittings and anodes have been installed for lots 72 and 78.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			September
			26, 2017

1 Brice Lawson 09/26/2017 3:59 PM

Redford installed continued installing the 12" SDR 26 sanitary sewer main between MH B-2 and MH B-3 up to approx. STA. 5+32. The wye fittings and anodes have been installed for lots 71 and 77. The exposed pipe that has not been covered at STA. 5+32 has been bedded in clean rock.

There is a ledge of rock that has been encountered while excavating these trenches. The large rock is being removed and seperated from the smaller material.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			September
			27, 2017

## Corrective action required:

1 Brice Lawson 09/27/2017 11:26 AM Redford has installed the 12" sanitary main on line B from approx. STA. 5+32 to STA. 5+76. The wye fittings and anode have been installed for lots 70 and 76. The 4" stubs have been installed for lots 71, 72, and 78. They are excavating the trenches for lot 77. KC Testing was on site performing testing of the trench backfill for lots 78, 79 and 80. It appeared that the backfill was being installed and compacted in lifts.

DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Thursday, September 28, 2017
Corrective action required:			
1 Brice Lawson 09/28	3/2017 10:09 AM		
	ed the 12" SDR 26 sewer m necks have been installed f		29 on line B. The
DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Wednesday,
Inspection			November
			15, 2017
Corrective action required:			
1 Brice Lawson 08/09	)/2017 2:45 PM		
Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the			

detention basin and he plans to build it after the cut is made in that location. Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Corrective action required:

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

Corrective action required:

6 Tom Chandler 09/15/2017 11:11 AM Backfill on sanitary sewer main being placed today. No testing has been done today. If testing lab can make it to site today they will backfill (3) roadway crossings.

Corrective action required:

7 Brice Lawson 09/27/2017 11:33 AM

I informed Mike with KC Testing, Thomas Hudgens and Darrin that the compaction test reports for the sanitary trenches that have been submitted so far do not have documentation for a visual inspection of the initial backfill that is being placed in the trenches. KC Testing will not perform moisture density testing of trenches that are too deep due to safety reasons. I informed them that the City will need documentation of visual inspections of the backfill of the sanitary trenched up to the point where KC Testing can perform the moisture density testing.

Corrective action required:

8 Brice Lawson 11/15/2017 10:30 AM

A crew is using a blade and a scraper and has began final grading and shaping of the proposed road subgrade on Merryman Ln and Amethyst Dr.

DEI-Sanitary Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			September
			29, 2017

1 Brice Lawson 09/29/2017 12:12 PM

Redford has installed the remaining 12" SDR 26 sewer main on line B into MH B-3. This was approx. 20' of pipe.

The base and two barrel sections for MH B-3 have been installed and the joints appear to be sealed.

The 12" SDR 26 sewer main has been connected to MH B-3 and installed up to approx. STA. 1+51.

The trench check has been installed on the stub for lot 76. The wye fitting, anode and trench check have been installed for lot 70.

The wye fittings and anodes have been installed for lots 44, 45, and 69.

The inverts have been installed for manholes B-1, A-7, nd A-4.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			October 02,
			2017

Corrective action required:

1 Brice Lawson 10/02/2017 11:32 AM On Saturday 9/1 Brian Byrd inspected the 12" sanitary main from approx. STA. 1+60 to approx. STA. 3+35.

The wyes for lots 46, 47 have been installed. The stubs and trench checks have been installed for lots 44 and 45. The stubs, wyes, trench checks and anodes have been installed for lots 67 and 68. Trench check and stub has been installed for lot 69.

The sanitary manhole frames and adjustment rings have been installed on MH A-7, B-1 and B-2.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			October 02,
			2017

Corrective action required:

1 Brice Lawson 10/02/2017 3:49 PM Redford installed the sewer stub and trench check for lot 46. They installed the trench check for lot 47.

They were working on installing the remainder of the sewer stub for lot 47.

They were partially backfilling the sewer stub trenches for lots 44 and 45. The area that is not being backfilled is where the proposed road will be. They plan to perform moisture density testing in this area.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			October 03,

Corrective action required:

Brice Lawson 10/03/2017 12:51 PM
 Redford has installed the 8" sanitary sewer from MH B-3 to approx. STA. 0+94. Jessie informed me that the lazer is set a 7.14% slope for this 8" main. The wye fitting and a

informed me that the lazer is set a 7.14% slope for this 8" main. The wye fitting and anode have been installed for lot 43. The main is being bedded in clean rock. The 8" main trench is being backfilled where it crosses SW Amethyst Dr. and KC Testing is on site performing compaction testing.

2017

The 12" main has been installed on line C from approx. STA. 3+35 to approx. STA. 3+91. This main is being bedded in clear rock. The wye and anodes have been installed for lots 66 and 48. The stubs for lots 44, 45, 46, 47 and 69 have been backfilled.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			October 03,
			2017

Corrective action required:

1 Brice Lawson 10/03/2017 2:49 PM

Redford installed the base, barrel and cone section for MH E-1. They installed the remaining 8" SDR 26 sewer main from approx. STA. 0+94 to MH E-1. The wye fitting and anode have been installed for lot 42.

This trench was being backfilled in compacted lifts.

The base and two barrel sections have been installed for MH C-1. The 12" SDR 26 sewer main pipe has been installed from approx. STA. 3+91 to MH C-1. The pipe was bedded in clean rock.

The sewer main on line C from MH B-3 to approx. STA. 3+30 is being backfilled in compacted lifts.

I asked the contractor to seperate and remove the large rocks from the trench backfill material.

	itary Sewer ction Inspection	Brice Lawson	Partial	Wednesday, October 04, 2017
Corrective action required: 1 Brice Lawson 10/04/2017 12:24 PM Redford has installed the sanitary stubs and trench checks for lots 66, 48, 42 and trenches have been backfilled for lots 48, 66 and 42. The crew said that KC Testing site earlier to perform compaction testing on the trench backfill of these sewer s				
	The sewer main tren approx. STA. 4+00 o	nch between MH B-3 and MH n sanitary line C.	I C-1 has been backfilled fro	m MH C-1 to
	The sewer main trei approx. STA. 0+25 o	nch between MH E-1 and MH n sanitary line E.	I b-3 has been backfilled fro	m MH E-1 to
DEI-Sanitary Sewer Construction Inspection		Brice Lawson	Partial	Monday, October 09, 2017
<ul> <li>Corrective action required:</li> <li>Brice Lawson 10/09/2017 3:44 PM</li> <li>Redford installed the 12" SDR 26 pipe from MH C-1 to approx. STA. 4+46. The pipe is bein bedded in clean rock. The wye fitting and anode have been installed for lots 49 and 65.</li> </ul>				
DEI-Eros (ESC) Ins	sion Sediment Control spection	Brice Lawson	Failed	Monday, October 09, 2017
Correcti 1	ve action required: There are problems	with the erosion control dev	rices on your site.	
	Dries Lawren 10/00	12017 12:00 014		

Brice Lawson 10/09/2017 12:06 PM

The silt fence located north of the temp. sediment trap has been damaged and needs to be repaired.

Sections of the silt fence along the north perimeter are laying down or silt is built of to the top of the silt fence making it ineffective.

Perform maintenance and repair these sections of silt fence.

DEI-Erosi (ESC) Insp	on Sediment Control pection	Brice Lawson	Partial	Thursday, November 02, 2017	
Corrective action required: 1 There are problems with the erosion control devices on your site.					
	Brice Lawson 10/09/	/2017 12:06 PM			
	The silt fence locate repaired.	d north of the temp. sedime	nt trap has been damaged a	nd needs to be	
		ence along the north perimet making it ineffective.	ter are laying down or silt is	built of to the	
	Perform maintenand	ce and repair these sections of	of silt fence.		
	ary Sewer tion Inspection	Brice Lawson	Partial	Monday, October 09, 2017	
Corrective action required: 1 Brice Lawson 10/09/2017 3:55 PM Redford installed the 12" SDR 26 sewer main from approx. STA. 4+46 to approx. STA. 5+20. The wyes and anodes have been installed for lots 64 and 50. The pipe is being bedded in clean rock.					
DEI-Storn Construct	n - Sewer tion Inspection	Brice Lawson	Partial	Monday, October 09, 2017	
Corrective action required: 1 Brice Lawson 10/09/2017 3:47 PM Redford installed CI 6-3 and approx. 100' of the 36" HDPE storm pipe from CI 6-3 towards CI 6-4. The pipe was being bedded in clean rock.					
DEI-Storn Construct	n - Sewer tion Inspection	Brice Lawson	Partial	Monday, October 09, 2017	
Corrective action required: 1 Brice Lawson 10/09/2017 3:53 PM Today Redford has installed a total of approx. 225' of the 36" HDPE storm pipe from CI 6-3 towards CI 6-4. The HDPE pipe was being bedded in clean rock.					

DEI-Storm - Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			October 10,
			2017

1 Brice Lawson 10/10/2017 11:41 AM

Redford has installed the remainder of the 36" HDPE pipe (approx. 55' Of 36") from CI 6-3 to CI 6-4. The pipe appeared to be bedded in clean rock. They installed the 36" pipe from CI 6-4 to JB 3-1. The pipe was being bedded in clean rock. There was rock encountered in both of these trenches that had to be broken up and removed prior to pipe installation. I informed Jessie and Darrin with Redford that when the 36" pipe is being installed in a trench that has rock walls, a minimum of 6" of clearance is required from the O/D of the pipe to the rock trench wall. I let them know that the manufacturer ADS recommends a trench width of 64" for a 36" pipe and this would be required for the trenches where there are no rock sidewalls to the trench. I let them know that the bedding rock should be installed to a minimum of 6" over the top of pipe from trench wall to trench wall. They said they understood.

JB 3-1 has been installed. It appeared to be set on a bed of clean rock.

DEI-Sanitary Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			October 10,
			2017

Corrective action required:

1 Brice Lawson 10/10/2017 11:38 AM

Redford has installed the 12" SDR 26 sanitary sewer main pipe from approx. STA. 5+20 to approx. STA. 6+60. The wye fittings and anodes for lots 62, 63, 51 and 52 have been installed. The 12" pipe has been bedded in clean rock.

DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Tuesday, October 10, 2017		
Corrective action require	ed:				
1 Brice Lawson 1	1 Brice Lawson 10/10/2017 2:56 PM				
Redford installed has installed the 12" sanitary main from approx. STA. 6+60 to STA.					
7+21.98. The n	nain is being bedded in clea	in rock. The wye fittings a	ind anodes have been		
installed for lot	ts 53 and 61.				

DEI-Storm - Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			October 10,
			2017

1 Brice Lawson 10/10/2017 2:59 PM

Redford installed FI 3-2 and the HDPE storm pipe from FI 3-2 to JB 3-1. The pipe has been bedded in clean rock. 1-20' section of 30" HDPE pipe has been installed from FI 3-2 towards FI 3-3. Rain has moved in and they are wrapping up work now.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			October 11,
			2017

## Corrective action required:

1 Brice Lawson 10/11/2017 11:39 AM

Redford installed the manhole base for MH C-2 and connected the 12" SDR 26 sewer main to it. The 12" sanitary main was installed from approx. STA. 7+21.98 to MH C-2. The main was being bedded in clean rock. The stub and tracer wire have been installed for lots 64, 65, and 49. The trench for the stub for lot 50 was being excavated. The 4" stub pipes were being bedded in clean rock. The stub trench for lot 49 was being partially backfilled outside of the road crossing area.

The following information if for the proposed sanitary manhole D-1.

Jeff Thorn approved the use of a standard manhole frame and a 6" adjustment ring instead of the ring and cover being cast into the concrete lid as shown on the plans.

DEI-Storm - Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			October 11,
			2017

## Corrective action required:

1 Brice Lawson 10/11/2017 11:29 AM

The standard detail for a field inlet that is included in the approved set of plans show the requirement to have 4" installed in the walls of the field inlet structures. The field inlet structures that have been delivered do have these 4" holes installed in them. I brought this to the attention of Gene Williams. We looked at the approved detail and the current City field inlet detail STM-2. STM-2 does not show a requirement to install any 4" drain holes in the walls of the field inlet. Gene is ok with the 4" holes not being installed for this project. STM-2 detail shows the concrete lid to be pinned to the structure. Gene was ok with me asking the contractor to pin the field inlets for this project.

I informed Darrin with Redford on site that the 4" holes would not be required and asked him to pin the concrete lids for the field inlets to the structure walls.

DEI-Storm - Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			October 12,

1 Brice Lawson 10/12/2017 3:06 PM

> Redford installed FI 3-3. The remainder of the HDPE between FI 3-2 and FI 3-3 has been installed. The HDPE pipe has been installed from 3-3 towards 3-4 to approx. STA. 4+80. This pipe was being bedded in clean rock.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			October 11,
			2017

Corrective action required:

1 Brice Lawson 10/11/2017 3:45 PM Redford installed the 4" SDR 26 sewer stubs for lots 61, 62, 63, 50 and 51. The pipes were being bedded in clean rock. The tracer wire was being installed with the stubs. The trench checks have not been installed for these stubs. The barrel section has been installed on MH C-2. The trench for the stub for lot 52 was being excavated when I left.

DEI-Sanitary Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			October 12,
			2017

## Corrective action required:

1 Brice Lawson 10/12/2017 2:58 PM

> Redford installed the wye, stub and trench check for lot 60. The trench check for lot 61, 62, 63 64, 65, 49, 50 and 51 have been installed per the contractor and partially backfilled. The sanitary lateral and trench checks have been installed for lots 52 and 53. The wyes and anodes have been installed for lots 54, 55, 58 and 59. The cone section, frame and lid have been installed on MH C-1. The barrel section has been installed for MH C-3. The 12" sanitary main has been installed from MH C-2 to approx. STA. 9+13. The sewer main was being bedded in clean rock. The sewer main has been backfilled from MH C-2 to approx STA. 5+54.

DEI-Sanitary Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			October 13,
			2017
Corrective action required	d:		
1 Brice Lawson 10	/13/2017 10:52 AM		
Redford installe	d the 12" sanitary main Lir	ne C from approx. STA. 9-	+13 to approx. STA. 9+72.
	g bedded in clean rock.		
DEI-Storm - Sewer	Brice Lawson	Partial	Friday,
220 SE Green Street	Lee's Summit, MO 64063   816.96	9.1200   816.969.1201 Fax   <u>city</u>	ofLS.net/Development

DEI-Storm - Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			October 16,
			2017

1 Brice Lawson 10/13/2017 10:54 AM

Redford installed the FI 3-4 and FI 3-5. The remaining 24" HDPE pipe was installed between FI 3-3 and FI 3-4. The 18" HDPE pipe has been installed between FI 3-4 and FI 3-5. The collars have been installed on the east and west pipes at FI 3-4.

Approx. 90' of 18" HDPE pipe has been installed from FI 3-4 on storm line 8. The pipe has been bedded in clean rock.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			October 16,
			2017

Corrective action required:

1 Brice Lawson 10/16/2017 12:30 PM

Redford has installed the 12" SDR 26 sewer main from approx. STA. 9+72 to approx. STA. 9+93.14. The pipe was being bedded in clean rock.

The base and barrel section for MH C-3 has been installed.

The wye fitting and anode for lot 57 has been installed.

The sanitary main trench and san stub lines have been backfilled from approx. STA. 5+54 to approx. STA. 6+95.

DEI-Storm - Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			October 13,
			2017

Corrective action required:

1 Brice Lawson 10/13/2017 3:38 PM

Redford was installing pipe collars and inverts in some of the storm structures on storm line 3 and 6. CI 6-5 has been installed and the 15" HDPE pipe has been installed from CI 6-4 to CI 6-5. The pipe was bedded in clean rock.

CI 6-5 appeared to be out of line with the hubs. I pointed this out to Jessie and they were adjusting this CI when I left.

October 13, 2017

1 Brice Lawson 10/16/2017 2:08 PM

Redford has installed CI 6-2 and FES 6-1. The 36" HDPE pipe has been installed connecting these structures. The 36" HDPE pipe has been installed from CI 6-2 to CI 6-3.

Collars and inverts have been installed in structures on storm line 6. The toe wall has been installed for FES 6-1.

	ary Sewer tion Inspection	Brice Lawson	Partial	Tuesday, October 17, 2017
Correctiv 1		d the base for manhole C-4. <sup>-</sup> +93.14 to MH C-4. The stubs		
	m - Sewer tion Inspection	Brice Lawson	Partial	Tuesday, October 17, 2017
Correctiv 1		2017 3:28 PM 8-1 and the invert inside this approx. STA. 0+90 to FI 8-1.	structure. The 18" HDPE sto	orm pipe has
DE-ESC - Cover)	(Vegetation/Ground	Brice Lawson	Failed	Monday, October 16, 2017
Correctiv	ve action required:			
1	Brice Lawson 10/16/			
		ea that was disturbed east of n disced, seeded and straw h	-	• •

installation has been disced, seeded and straw has been installed over this area. K-31 seed was used. The area is not graded smooth there are ruts and areas that are holding water. It appears that the area was very wet when the discing was done.

Some of the slopes of the temporary detention basin have been covered with straw matting. The grade appears to be very rough and not ready for seeding.

Make necessary adjustments to the grade prior to seeding.

(ESC) Ins	-	Brice Lawson	Failed	Thursday, October 26, 2017	
Correcti 1	Corrective action required: 1 Brice Lawson 10/26/2017 11:47 AM Replace the silt fence in the southwest corner of the site that was removed during the sanitary sewer installion. Add proper inlet protection around the FI that is located just we of the west construction entrance.				
	I informed Darrin of done over the new s	these issues and he said he said he said he said he sanitary line.	would get them done after t	he grading is	
	Brice Lawson 11/02, The silt fence has be	/2017 4:02 PM een installed at the southwes	t corner of the site.		
Construc	tary Sewer ction Inspection	Brice Lawson	Partial	Wednesday, October 18, 2017	
Correctiv 1	ve action required: Brice Lawson 10/18, Redford has installe has been installed fo	d the trench checks for lots 5	57, 58, 59, 55 and 54. The sa	nitary lateral	
	Redford said they in	stalled the inverts on sanitar	y lines C and E except for M	H C-3.	
	MCIB 4K concrete m	ix was used for the inverts.			
	m - Sewer ction Inspection	Brice Lawson	Partial	Wednesday, October 18, 2017	
1 Correctiv 2	ve action required: Cut or fill all lift hoo ve action required:	/2017 12:57 PM d the inverts and interior col ks on storm box lids. d storm box lids should be gro		5.	
	Install mesh in front	of 4" weep holes			
	Install 3/4" rock infr	ont of weep holes as shown	on the CI detail		

Pin the FI lids to the structures

Remove 4" knockouts

Remove excess concrete from pipes inside the storm structures

Grout pipe collars

DEI-Sanitary Sewer	Brice Lawson	Failed	Thursday,
Construction Inspection			October 19,
			2017

Corrective action required:

Brice Lawson 10/19/2017 2:50 PM
 THe sanitary main line C has been backfilled from approx. STA. 8+00 to 9+90.

The inverts have been installed in manholes C-1, B-3 and E-1.

The majority of the manholes need the following: -Fill the lift holes with non shrink grout -Remove excess mastic from joints -Remove excess concrete from sanitary main pipes, steps and frames -Remove green paint from the lids

MH C-3-The gap between the barrel section and the cone is over 1/4" -- makd necessary adjustments

MH C-1- The invert is too narrow and the adjustment ring is broke - make necessary repairs or adjustments

DEI-Storm - Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			October 25,
			2017

Corrective action required:

1 Corrections need to be made to the Storm Sewer

Corrective action required:

2 Brice Lawson 10/25/2017 4:55 PM

Redford installed CI 5-3 and approx 80' of 48" HDPE from this curb inlet towards CI 5-4. The CI was set on a bed of clean rock and the pipe was being bedded in clean rock. This section of line is below the street. I let Jessie know that compaction tests should be taken atleast every 50' under a proposed road. This section was being backfilled and KC Testing was on site for compaction testing.

DEI-Sanitary Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			October 23,
			2017

1 Brice Lawson 10/23/2017 8:52 AM

There has been a revision to sanitary sheet C.406. This revision was due to the location of the existing water main. This revision includes a note to allow the sanitary and water main to have a 5' horizontal seperation between the two mains. I asked Gene Williams if this 5' of seperation (instead of 10' of seperation shown in the Dand C Manual) is acceptable. He is ok with this 5' of seperation.

This revision also requires the existing FH 060-119 to be relocated to the south side of the existing water main to avoid the sanitary sewer from being located beneath the fire hydrant.

The revised plan sheet was delivered to Darrin with Redford Construction.

DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Tuesday, October 24, 2017	
Corrective action required: 1 Brice Lawson 10/24/2017 9:38 AM Redford has installed the 12" SDR 26 sewer main from MH C-3 to the wye fitting for on sanitary line D. The anode has been installed for lot 56. The pipe is being bedded clean rock.				
DEI-Water Line - Fire Hydra	ant Brice Lawson	Partial	Monday, October 23, 2017	
Corrective action required: 1 Brice Lawson 10/23/2017 9:26 AM Relocate FH 060-119 to the south side of the existing water main to avoid the proposed sanitary line being located beneath the fire hydrant.				
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Tuesday, October 24, 2017	
Corrective action required 1 Brice Lawson 10/	24/2017 4:30 PM		2017	

Redford has installed the remainder of the 12" SDR 26 pipe on Sanitary Line D from STA. 0+68.52 to manhole D-1. The base for manhole D-1 has been installed. They have installed approx 36' of the 12" SDR 26 sewer line from MH D-1 towards MH D-2. The pipe was being bedded in clean rock.

There was a revision to line D that is dated 10/16/17.

DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Wednesday, October 25, 2017
-	25/2017 10:51 AM s to install the 12" sanit	ary sewer main on line D.	
DEI-Water Line - Construction	on Brice Lawson	Partial	Wednesday, October 25, 2017
of County Line Rd	tion potholed the existi . This is east of Pryor. T a water leak on this lin	ng 12" water main that ru he water coming from the e. I sent an email to Evan I	se potholes is very clear
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Wednesday, October 25, 2017
Line D. The pipe h	the 12" SDR 26 sewer n as been bedded in clea approx. 3.5' from the n	nain from approx. STA. 2+4 n rock. The existing fire hy lew sewer main. I will chec	drant that is called out
The crew was inst	alling inverts in some o	f the sanitary manholes.	
The stub and tren	ch check for lot 56 has	been installed.	
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Thursday, October 26,

1 Brice Lawson 10/26/2017 11:45 AM Redford continues to install the 12" SDR 26 sewer main between MH D-1 and D-2.

DEI-Water Line - Construction Brice	Lawson	Partial	Friday,
Inspection			November

Corrective action required:

Brice Lawson 11/10/2017 11:30 AM Redford installed 40' of 8" C900 water main with tracer wire and water line marker tape. The line appeared to be installed at least 42" from current grade. The pipe was bedded in clean rock. This line was installed on water line 1 from approx. STA. 11+48 to approx. STA. 11+88. The line was being backfilled in lifts. The trench was opened up over 48" wide and KC Testing was on site to perform compaction testing.

DEI-Storm - Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			October 27,
			2017

Corrective action required:

1 Brice Lawson 10/27/2017 1:52 PM

Redford has installed JB 5-2, CI 5-3, CI 5-4, FI 5-5 and FI 5-6. The 36" pipe has been installed between FI 5-5 and FI 5-6. The 42" pipe has been installed between FI 5-5 and CI 5-4. The 60" pipe has been installed from JB 5-2 to where FES 5-1 will is proposed. FES 5-1 has not been installed at this time.

The pipe was being bedded and covered with rock.

Some of the exterior collars have been installed on these pipes where they connect to the structures.

DEI-Sanitary Sewer	Brice Lawson	Partial	Friday,
Construction Inspection			October 27,
			2017

Corrective action required:

 Brice Lawson 10/27/2017 2:13 PM Redford has installed the flat top manhole lid on MH D-1. This flat top was approved by Water Utilities. The base for MH D-2 has been installed and the 12" SDR 26 sewer main has been installed from approx. STA. 3+40 to MH D-2. The invert has been installed in MH D-2.

10, 2017

DE-ESC - (Vegetation/Ground Cover)	Brice Lawson	Failed	Monday, October 30, 2017
Corrective action required: 1 Brice Lawson 10/30 Properly stabilize th	/2017 11:52 AM ne inacitve areas on this site.		
DEI-Storm - Sewer Construction Inspection	Brice Lawson	Partial	Thursday, November 02, 2017
Corrective action required: 1 Brice Lawson 11/02	/2017 4:04 PM		
-	l have been installed. It appe	ars that the toewall was ins	talled per the
The adjustment ring JB 5-5.	g, frame and lid have been in	stalled with mastic between	the joints on
DEI-Sanitary Sewer Construction Inspection	Brice Lawson	Partial	Wednesday, November 22, 2017
Corrective action required:			,
fitting on the sewer	/2017 6:18 AM rd replaced a broken 45 degr lateral for lot 65. The broken iring the air pressure test.		
DEI-Sanitary Sewer - Air Test	Brice Lawson	Partial	Wednesday, November 01, 2017
Corrective action required: 1 Brice Lawson 11/01	/2017 4·05 PM		
On 10/31 Redford p The gauge calibration	performed an air test on sanif on was verified on 11/1 by th 8:31 and passed the test.	-	
Today:			
	d from MH A-1 to Existing Cit nding pressure was 4psi. This		gining pressure
Line A was air teste	Line A was air tested from MH A-1 to MH A-2 for 14:10. Begining pressure was 3.5psi and		
220 SE Green Street   Lee'	s Summit, MO 64063   816.969.1200	816.969.1201 Fax   <u>cityofLS.net/Dev</u>	<u>elopment</u>

the ending pressure was 3.45psi. This test passed.

Line A was air tested from MH A-2 to MH A-3. Begining pressure was 3.5psi and the ending pressure was 3.4psi. This test passed.

<b>DEI-Sanitary Sewer - Vacuum</b>	Brice Lawson	Passed
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Tuesday, November 14, 2017

Corrective action required:

1 Brice Lawson 11/01/2017 4:21 PM

On 10/31 Redford attempted to vac test MH U-1 but the vac of 10" of mercury was not achieved due to a leak. Make proper corrections and perform test

MH A-1, Redford attempted to vac test but the vac of 10" of mercury was not achieved due to a leak. It appears there is a leak at the adjustment ring joint. Make proper corrections and perform test.

MH A-2, Vac test was performed for 2.5 minutes. Test started at 10" of mercury and ended at 9.5" of mercury. This test passed.

MH A-3, Redford attempted to vac test but the vac of 10" of mercury was not achieved due to a leak. It appears there is a leak at the adjustment ring joint. Make proper corrections and perform test.

Brice Lawson 11/14/2017 6:37 AM The joints for the adjustment rings for MH A-1, A-2 and U-1 have been grouted and retested on 11-9-17. Bryan Byrd witnessed the vac tests and the tests passed.

DEI-Sanitary Sewer - Air Test	Brice Lawson
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Passed

Friday, November 03, 2017

Corrective action required:

1 Brice Lawson 11/03/2017 1:47 PM Redford performed air testing on the following line segments.

> MH A-3 to MH A-4 - 15" Sewer Main Begining Pressure 3.75 psi Ending Pressure 3.75 psi Test Time 27:04 Test Passed

MH A-4 to MH A-5 - 15" Sewer Main

Begining Pressure 3.7 Ending Pressure 3.65 Test Time 32:51 Test Passed

DEI-Sanitary Sewer - Vacuum Brice Lawson

Failed

Friday, November 03, 2017

Corrective action required:

1 Brice Lawson 11/01/2017 4:21 PM

On 10/31 Redford attempted to vac test MH U-1 but the vac of 10" of mercury was not achieved due to a leak. Make proper corrections and perform test

MH A-1, Redford attempted to vac test but the vac of 10" of mercury was not achieved due to a leak. It appears there is a leak at the adjustment ring joint. Make proper corrections and perform test.

MH A-2, Vac test was performed for 2.5 minutes. Test started at 10" of mercury and ended at 9.5" of mercury. This test passed.

MH A-3, Redford attempted to vac test but the vac of 10" of mercury was not achieved due to a leak. It appears there is a leak at the adjustment ring joint. Make proper corrections and perform test.

Corrective action required:

2 Brice Lawson 11/03/2017 1:55 PM

MH A-4 and MH A-5 Redford attempted a vacuum test on these two manholes but a vacuum of 10" of mercury was not achieved.

Perform vac testing on these manholes

Brice Lawson 11/14/2017 6:40 AM

The joints between the adjustment rings have been grouted for MH A-4 and MH A-5. Bryan Byrd witnessed a vacuum test on these two manholes on 11-9-17 and the tests passed.

DEI-Miscellaneous PWORKS	Brice Lawson	Passed	Thursday,
Inspection			November
			02, 2017

Corrective action required:

1 Brice Lawson 11/02/2017 12:34 PM On 11/1/17 Redford performed testing of the sanitary sewer stub tracer wires for lots 60,61,62,63,64,65,66,67,68,69,70,71,82,83,84,85,

86,87,88,89,90,91,92 and 93. A locate tool was connected to a screw on each lateral tracer box and the tracer wire was locatable to the sewer main. The tracer wire boxes for these lots are attached to a green colored 2" by 4" vertical board with duct tape.

DEI-Storm - Sewer	Brice Lawson	Partial	Monday,
Construction Inspection			November

Corrective action required:

1 Brice Lawson 11/06/2017 3:21 PM

Redford has installed CI 2-1, CI 2-2 and the 36" HDPE storm pipe that connects the two. The pipe is being bedded in clean gravel. The east wall of the existing FI that is located west of CI 2-1 has been removed to install the new pipe and collar.

The existing 12" water main is approx. 1'3" from the back edge of CI 2-2. There will not be a 10' seperation between the existing water main and the 36" HDPE storm pipe that runs from CI 2-2 to FI 2-3. Gene Williams approved (by a phone conversation) the minimal seperation between these pipes and structures.

DEI-Sanitary Sewer - Vacuum	Brice Lawson	Failed
DEI-Samuary Sewer - Vacuum	Brice Lawson	Falleu

Tuesday, November 07, 2017

06, 2017

Corrective action required:

Brice Lawson 11/07/2017 4:32 PM
 Bryan Byrd witnessed vacuum testing on the following manholes:

MH A-7 Test Passed

MH B-1 Test Passed

Corrective action required:

2 Brice Lawson 11/07/2017 4:34 PM Bryan Byrd witnessed a vacuum test on MH A-6.

This test failed.

Make necessary repairs and retest.

Brice Lawson 11/14/2017 6:42 AM The joint between the adjustment ring has been grouted. On 11-9-17 Bryan Byrd witnessed a vacuum test on MH A-6 and the test passed.

DEI-Storm - Sewer Construction Inspection Corrective action required: 1 Brice Lawson 11/4 I delivered revised	Brice Lawson 06/2017 4:22 PM d plans for sheets C.301 an	Partial d C.302 to Darrin wit	Monday, November 06, 2017 h Redford Construction.
DEI-Storm - Sewer Construction Inspection	Brice Lawson	Partial	Tuesday, November 07, 2017
exterior collars ar installed betweer to the east. It app back filled as it is	the exterior pipe collars or d invert have been installe	ed at FI 2-3. The 36" H 160' of 30" HDPE has bedded in clean rock ne contractor that co	been installed from FI 2-3 . The HDPE pipe is being
DEI-Sanitary Sewer - Air Tes	t Brice Lawson	Failed	Tuesday, November 07, 2017
-	07/2017 11:51 AM e 15" sanitary main MH A-	5 to MH A-6	
The first time the	line was pressurized a leak	was noticed and the	test was stopped.
The second test s Test Time: 33:58 Failed Test	tarted at 3.65 psi and ende	ed at 2.45 psi.	
The third test sta Test time: 33:58 Failed Test	ted at 3.7 psi and ended a	t 2.45 psi	
Make necessary c	orrections and retest this I	ine segment.	
DEI-Sanitary Sewer - Air Te	t Brice Lawson	Partial	Tuesday, November 14, 2017

1		Brice Lawson 11/07/2017 4:31 PM Bryan Byrd witnessed air testing on the following line sanitary sewer line segments.				
	MH A-6 to MH A-	7 Test Passed				
	MH A-7 to MH B-	1 Test Passed				
	orm - Sewer uction Inspection	Brice Lawson	Partial	Wednesday, November 08, 2017		
Correct	Redford has insta HDPE storm pipe HDPE storm pipe east. The HDPE pi	08/2017 11:50 AM lled the base section for between FI 2-4 and FI 2- Approx. 20' of the 24" H	FI 2-5 on storm line 2. Th 5 has been installed. This IDPE pipe has been instal ars to be bedded in clean ed.	ne remainder of the 24" s is approx. 212' of 24" lled from FI 2-5 to the		
DEI-Sar	nitary Sewer - Vacuu	m Brice Lawson	Partial	Wednesday, November 08, 2017		
Correct 1	-	08/2017 3:43 PM	djustment rings and perf tnessed these tests.			
	MH A-1 Passed					
	MH U-1 Passed					
	MH A-3 Passed					
	MH A-4 Passed					
	orm - Sewer action Inspection	Brice Lawson	Partial	Wednesday, November 08, 2017		
Correct 1	tive action required: Brice Lawson 11/0 Redford installed	08/2017 4:36 PM	ne remainder of the 24" I			

installed between FI 2-5 and FI 2-6. The exterior pipe collars have been installed on the east and west pipes at FI 2-5. The invert and the exterior pipe collar has been installed at FI 2-6. The pipe that is exposed has bedding gravel below and above the pipe.

DEI-Sanit	ary Sewer - Vacuum	Brice Lawson	Partial	Tuesday, November 14, 2017
Correctiv 1	ve action required: Brice Lawson 11/14/ On 11-9-17 Bryan By	2017 6:45 AM rd witnessed vacuum testin o	on the following manholes:	
	MH A-5 - Test Passed	1		
	MH A-6 - Test Passed	3		
	MH B-1 - Test Passec	1		
	MH B-2 - Test Passec	1		
	MH B-3 - Test Passec	1		
	n - Sewer tion Inspection	Brice Lawson	Partial	Thursday, November
Correctiv 1	joint between the to	2-5 has been installed. It app p and bottom sections. Appr II end facing upstream from I	ox. 40' of 24" HDPE storm p	ipe has been
	n - Sewer tion Inspection	Brice Lawson	Partial	Friday, November 10, 2017
Correctiv 1	installed between CI	2017 11:35 AM I CI 4-1, CI 4-2, CI 4-3 and CI 4 4-4 and CI 4-3. The 18" HDPI IDPE pipe has been installed	E pipe has been installed be	tween Cl 4-3
	220 SE Green Street   Lee's	Summit. MO 64063   816.969.1200   8	816.969.1201 Fax   citvofLS.net/Deve	lopment

of the 24" HDPE storm pipe has been installed between CI 4-1 and FI 2-5. There is approx. 30" of clearance between the existing 12" water main and the 24" storm pipe at the water main crossing on storm line 4. This crossing is just north of FI 2-5. The exterior collars have been installed on CI 4-1 and CI 4-2. The exterior collar on the west pipe at CI 4-4 has been installed. The north pipe collar and invert have been installed at FI 2-5. The west exterior pipe collar has been installed at CI 2-1. The concrete lids have been installed on FI 2-3, FI 2-4 and FI 2-6.

Pending

Corrective action required: 1 fix Corrective action required: fix 1 Corrective action required: 1 fix Corrective action required: fix 1

Corrective action required: 1 fix Corrective action required: 1 fix

DEI-Water Line - Construction Brice Lawson	Partial	Friday,
Inspection		November
		10, 2017

Corrective action required:

- 1 Brice Lawson 11/10/2017 11:30 AM
  - Redford installed 40' of 8" C900 water main with tracer wire and water line marker tape. The line appeared to be installed at least 42" from current grade. The pipe was bedded in clean rock. This line was installed on water line 1 from approx. STA. 11+48 to approx. STA. 11+88. The line was being backfilled in lifts. The trench was opened up over 48" wide and KC Testing was on site to perform compaction testing.

Corrective action required:

2 Brice Lawson 11/10/2017 2:57 PM

Redford installed 40' of 8" C900 water line on water line 1 from STA 3+25 to STA. 3+65. Tracer wire and bury tape have been installed with this water line.

DEI-Storm - Sewer	Brice Lawson	Partial	Tuesday,
Construction Inspection			November
			14, 2017

Corrective action required:

1 Brice Lawson 11/10/2017 11:35 AM

Redford has installed CI 4-1, CI 4-2, CI 4-3 and CI 4-4. The 15" HDPE storm pipe has been installed between CI 4-4 and CI 4-3. The 18" HDPE pipe has been installed between CI 4-3 and CI 4-2. The 24" HDPE pipe has been installed between CI 4-2 and CI 4-1. The remainder of the 24" HDPE storm pipe has been installed between CI 4-1 and FI 2-5. There is approx. 30" of clearance between the existing 12" water main and the 24" storm pipe at the water main crossing on storm line 4. This crossing is just north of FI 2-5. The exterior collars have been installed on CI 4-1 and CI 4-2. The exterior collar on the west pipe at CI 4-4 has been installed. The north pipe collar and invert have been installed at FI 2-5. The west exterior pipe collar has been installed at CI 2-1. The concrete lids have been installed on FI 2-3, FI 2-4 and FI 2-6.

Corrective action required:

2

Brice Lawson 11/14/2017 1:36 PM

Redford installed CI 4-5 and the 15" HDPE storm pipe from CI 4-5 to CI 4-4. The invert and east exterior pipe collar has been installed at CI 4-4. The west pipe collar and invert were being installed.

DEI-Water Line - Construction Brice Law	vson Partial	Monday,
Inspection		November

Corrective action required:

1 Brice Lawson 11/10/2017 11:30 AM

Redford installed 40' of 8" C900 water main with tracer wire and water line marker tape. The line appeared to be installed at least 42" from current grade. The pipe was bedded in clean rock. This line was installed on water line 1 from approx. STA. 11+48 to approx. STA. 11+88. The line was being backfilled in lifts. The trench was opened up over 48" wide and KC Testing was on site to perform compaction testing.

13, 2017

Corrective action required:

2 Brice Lawson 11/10/2017 2:57 PM

Redford installed 40' of 8" C900 water line on water line 1 from STA 3+25 to STA. 3+65. Tracer wire and bury tape have been installed with this water line.

Corrective action required:

3 Brice Lawson 11/13/2017 11:47 AM

Redford installed the 8" C900 water line with tracer wire for water line 1 from approx. STA. 0+29.17 to STA. 1+39.99. The Tee fitting has been installed at STA. 1+39.99.

DEI-Water Line - Construction Brice Lawson	Partial	Monday,
Inspection		November
		13, 2017

Corrective action required:

1 Brice Lawson 11/10/2017 11:30 AM

Redford installed 40' of 8" C900 water main with tracer wire and water line marker tape. The line appeared to be installed at least 42" from current grade. The pipe was bedded in clean rock. This line was installed on water line 1 from approx. STA. 11+48 to approx. STA. 11+88. The line was being backfilled in lifts. The trench was opened up over 48" wide and KC Testing was on site to perform compaction testing.

Corrective action required:

2 Brice Lawson 11/10/2017 2:57 PM

Redford installed 40' of 8" C900 water line on water line 1 from STA 3+25 to STA. 3+65. Tracer wire and bury tape have been installed with this water line.

Corrective action required:

3 Brice Lawson 11/13/2017 11:47 AM

Redford installed the 8" C900 water line with tracer wire for water line 1 from approx. STA. 0+29.17 to STA. 1+39.99. The Tee fitting has been installed at STA. 1+39.99.

4 Brice Lawson 11/13/2017 2:46 PM

Redford installed the 8" gate valve on line 2 near STA. 0+00. Approx. 74' of C900 water line has been installed from STA. 0+00 to approx. STA. 0+74. Tracer wire has been installed with this pipe and utility marker tape is being installed in the trench. Two vertical 45 degree bend fittings have been installed with rebar loops around the fittings. The rebar loops have been installed in a thrust block below the 45 degree fittings. KC Testing is on site to observe compaction testing for the water line. The DI fittings have been wrapped in 12 mil poly wrap and the T bolts have been sprayed with an undercoating.

A thrust block has been installed on the 45 degree bend fitting on line 1 at STA.0+95.15.

MCIB WA610 concrete was used for the thrust blocks.

DEI-Water Line - Construction Brice Lawson	Partial	Tuesday,
Inspection		November
		14, 2017

Corrective action required:

1 Brice Lawson 11/10/2017 11:30 AM

Redford installed 40' of 8" C900 water main with tracer wire and water line marker tape. The line appeared to be installed at least 42" from current grade. The pipe was bedded in clean rock. This line was installed on water line 1 from approx. STA. 11+48 to approx. STA. 11+88. The line was being backfilled in lifts. The trench was opened up over 48" wide and KC Testing was on site to perform compaction testing.

Corrective action required:

2 Brice Lawson 11/10/2017 2:57 PM

Redford installed 40' of 8" C900 water line on water line 1 from STA 3+25 to STA. 3+65. Tracer wire and bury tape have been installed with this water line.

Corrective action required:

3 Brice Lawson 11/13/2017 11:47 AM

Redford installed the 8" C900 water line with tracer wire for water line 1 from approx. STA. 0+29.17 to STA. 1+39.99. The Tee fitting has been installed at STA. 1+39.99.

Corrective action required:

4 Brice Lawson 11/13/2017 2:46 PM

Redford installed the 8" gate valve on line 2 near STA. 0+00. Approx. 74' of C900 water line has been installed from STA. 0+00 to approx. STA. 0+74. Tracer wire has been installed with this pipe and utility marker tape is being installed in the trench. Two vertical 45 degree bend fittings have been installed with rebar loops around the fittings. The rebar loops have been installed in a thrust block below the 45 degree fittings. KC Testing is on site to observe compaction testing for the water line. The DI fittings have been wrapped in 12 mil poly wrap and the T bolts have been sprayed with an undercoating.

A thrust block has been installed on the 45 degree bend fitting on line 1 at STA.0+95.15.

MCIB WA610 concrete was used for the thrust blocks.

Corrective action required:

5 Brice Lawson 11/14/2017 1:23 PM

Redford installed an 8" Clow gate valve just west of the Tee fitting located at STA. 0+00 on water line 2. A 1' piece of C900 was installed between the valve and the tee fitting. A thrust block has been installed on the tee fitting. A tracer wire has been installed over to the tee fitting.

DEI-Sanit	tary Sewer - Vacuum	Brice Lawson	Partial	Monday, November 20, 2017
Correctiv	ve action required:			
1	Brice Lawson 11/14/	2017 6:45 AM		
	On 11-9-17 Bryan By	vrd witnessed vacuum	testin on the following manhol	es:
	MH A-5 - Test Passe	d		
	MH A-6 - Test Passe	a		
	MH B-1 - Test Passed	d		
		ŭ		
	MH B-2 - Test Passed	d		
	MH B-3 - Test Passed	d		
Correctiv	ve action required:			
2	Brice Lawson 11/20/	2017 12:30 PM		
	Redford vacuum tes	ted the following man	holes:	
	MH E-1			
	Start test 10" mercu	•		
	End test 9.75" mercu			
	Test Duration 2.5 mi	in		
	Test passed			
	MH C-1			
	Start test 10" mercu	rv.		
	End test 10" mercur	-		
	Test Duration 3:00	у		
	Test passed			
	MH C-2			
	Start test 10" mercu	ry		

End test 9.75" mercury Test Duration 2:30 Test passed

DEI-Sani	itary Sewer - Air Test	Brice Lawson	Partial	Tuesday, November 14, 2017
Correcti 1	ve action required: Brice Lawson 11/14, On 11-9-17 Bryan By	/2017 6:52 AM yrd witnessed air testing on t	the following sanitary sewer	
	MH B-1 to MH B-2	Test Passed		
	MH B-2 to MH B-3	Test Passed		
DEI-Sani	itary Sewer - Air Test	Brice Lawson	Partial	Monday, November 20, 2017
Correcti 1	ve action required: Brice Lawson 11/14, On 11-9-17 Bryan By	/2017 6:52 AM yrd witnessed air testing on t	the following sanitary sewer	line segments.
	MH B-1 to MH B-2	Test Passed		
Correcti 2	MH B-2 to MH B-3 ve action required: Brice Lawson 11/20, Redford performed		ine segements:	
	Cherne Gauge Cal. D	Date 10/31/17		
	MH E-1 to MH B-3 Start press. 3.9 psi End press. 3.85 psi Test Duration 7:34 Test Passed			
	MH B-3 to MH C-1 Start press 3.65 psi End press 3.5 psi Test Duration 23:01 Test passed			

3 Brice Lawson 11/20/2017 12:27 PM

Redford attempted to test the main segment from MH C-1 to MH C-2. The test did not start as the minimum test pressure could not be achieved.

Make necessary corrections and test this line segment.

DEI-Storm - Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			November
			15, 2017

Corrective action required:

1 Brice Lawson 11/10/2017 11:35 AM

Redford has installed CI 4-1, CI 4-2, CI 4-3 and CI 4-4. The 15" HDPE storm pipe has been installed between CI 4-4 and CI 4-3. The 18" HDPE pipe has been installed between CI 4-3 and CI 4-2. The 24" HDPE pipe has been installed between CI 4-2 and CI 4-1. The remainder of the 24" HDPE storm pipe has been installed between CI 4-1 and FI 2-5. There is approx. 30" of clearance between the existing 12" water main and the 24" storm pipe at the water main crossing on storm line 4. This crossing is just north of FI 2-5. The exterior collars have been installed on CI 4-1 and CI 4-2. The exterior collar on the west pipe at CI 4-4 has been installed. The north pipe collar and invert have been installed at FI 2-5. The west exterior pipe collar has been installed at CI 2-1. The concrete lids have been installed on FI 2-3, FI 2-4 and FI 2-6.

Corrective action required:

2 Brice Lawson 11/14/2017 1:36 PM

Redford installed CI 4-5 and the 15" HDPE storm pipe from CI 4-5 to CI 4-4. The invert and east exterior pipe collar has been installed at CI 4-4. The west pipe collar and invert were being installed.

Corrective action required:

Brice Lawson 11/15/2017 10:27 AM
 Redford is cutting into the west side of the existing City FI on Storm line 1. The hole is being made to accept a 42" storm pipe.

DEI-Storm - Sewer	Brice Lawson	Partial	Thursday,
Construction Inspection			November
			16, 2017

Corrective action required:

1 Brice Lawson 11/10/2017 11:35 AM

Redford has installed CI 4-1, CI 4-2, CI 4-3 and CI 4-4. The 15" HDPE storm pipe has been installed between CI 4-4 and CI 4-3. The 18" HDPE pipe has been installed between CI 4-3 and CI 4-2. The 24" HDPE pipe has been installed between CI 4-2 and CI 4-1. The remainder

of the 24" HDPE storm pipe has been installed between CI 4-1 and FI 2-5. There is approx. 30" of clearance between the existing 12" water main and the 24" storm pipe at the water main crossing on storm line 4. This crossing is just north of FI 2-5. The exterior collars have been installed on CI 4-1 and CI 4-2. The exterior collar on the west pipe at CI 4-4 has been installed. The north pipe collar and invert have been installed at FI 2-5. The west exterior pipe collar has been installed at CI 2-1. The concrete lids have been installed on FI 2-3, FI 2-4 and FI 2-6.

Corrective action required:

2 Brice Lawson 11/14/2017 1:36 PM

Redford installed CI 4-5 and the 15" HDPE storm pipe from CI 4-5 to CI 4-4. The invert and east exterior pipe collar has been installed at CI 4-4. The west pipe collar and invert were being installed.

Corrective action required:

Brice Lawson 11/15/2017 10:27 AM
 Redford is cutting into the west side of the existing City FI on Storm line 1. The hole is being made to accept a 42" storm pipe.

Corrective action required:

4 Brice Lawson 11/16/2017 11:25 AM

Redford has installed the FI 1-1 and they are installing the 42" HDPE storm pipe between FI 1-1 and FI 1-2.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Tuesday,
Inspection			November
			21, 2017

Corrective action required:

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Corrective action required:

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary sediment basin located on the north edge of the site.

Corrective action required:

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin. Corrective action required:

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Corrective action required:

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

Corrective action required:

6 Tom Chandler 09/15/2017 11:11 AM Backfill on sanitary sewer main being placed today. No testing has been done today. If testing lab can make it to site today they will backfill (3) roadway crossings.

Corrective action required:

7 Brice Lawson 09/27/2017 11:33 AM

I informed Mike with KC Testing, Thomas Hudgens and Darrin that the compaction test reports for the sanitary trenches that have been submitted so far do not have documentation for a visual inspection of the initial backfill that is being placed in the trenches. KC Testing will not perform moisture density testing of trenches that are too deep due to safety reasons. I informed them that the City will need documentation of visual inspections of the backfill of the sanitary trenched up to the point where KC Testing can perform the moisture density testing.

Corrective action required:

8 Brice Lawson 11/15/2017 10:30 AM

A crew is using a blade and a scraper and has began final grading and shaping of the proposed road subgrade on Merryman Ln and Amethyst Dr.

Corrective action required:

9 Brice Lawson 11/21/2017 11:33 AM

The road subgrade on this project has some areas that appear to be too wet. The contractor has scarified the entire road width on Amethyst north of approx. STA. 2+00 to approx. STA. 3+60. Areas on Merryman are being removed and replaced with soil that appears to be dryer.

DEI-Sanitary Sewer - Air Test Brice Lawson

Partial

Wednesday, November 22, 2017

Corrective action required:

Brice Lawson 11/14/2017 6:52 AM
 On 11-9-17 Bryan Byrd witnessed air testing on the following sanitary sewer line segments.

MH B-1 to MH B-2 Test Passed

MH B-2 to MH B-3 Test Passed

Corrective action required:

2 Brice Lawson 11/20/2017 12:24 PM

Redford performed air testing on the following line segements:

Cherne Gauge Cal. Date 10/31/17

MH E-1 to MH B-3 Start press. 3.9 psi End press. 3.85 psi Test Duration 7:34 Test Passed

MH B-3 to MH C-1 Start press 3.65 psi End press 3.5 psi Test Duration 23:01 Test passed

Corrective action required:

3 Brice Lawson 11/20/2017 12:27 PM

> Redford attempted to test the main segment from MH C-1 to MH C-2. The test did not start as the minimum test pressure could not be achieved.

Make necessary corrections and test this line segment.

Brice Lawson 11/22/2017 1:05 PM A broken 45 degree bend was replaced at the wye fitting for lot 65.

Today Bryan Byrd witnessed an air test on the sanitary main from MH C-1 to MH C-2. This test passed.

DEI-Subgrade Inspection	Brice Lawson	Partial	Wednesday,
			November
			22, 2017
Corrective action required:			

prrective action required:

1 Brice Lawson 11/22/2017 3:44 PM

> The subgrade for SW Amethyst, SW Merryman and SW Alabaster has been shaped and compacted. There are areas of the subgrade that has been spot treated with fly ash that was tilled into the soil surface and compacted. Brian with Spalding let me know that the testing lab was on site taking compaction tests of the road and the tests passed.

> The subgrade elevation was spot checked and it appeared to be within the tolerance of 1/4". There are a few rocks in the surface that the contractor will remove.

DEI-Subgrade Inspection Brice Lawson Pending **Comments:**