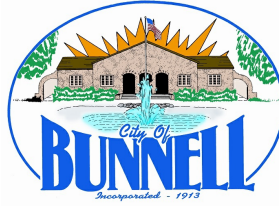


**CATHERINE D. ROBINSON**  
**MAYOR**

**JOHN ROGERS**  
**VICE-MAYOR**

**DR. ALVIN B. JACKSON, JR.**  
**CITY MANAGER**



*Crossroads of Flagler County*

**COMMISSIONERS:**

**TONYA GORDON**

**TINA-MARIE SCHULTZ**

**PETE YOUNG**

## **BUNNELL CITY COMMISSION MEETING**

**Monday, July 24, 2023**

**7:00 PM**

1769 East Moody Boulevard (GSB),  
Chambers Room  
Bunnell, FL 32110

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**A. Call Meeting to Order and Pledge Allegiance to the Flag**

**Roll Call**

**Invocation for our Military Troops and National Leaders**

**B. Introductions, Commendations, Proclamations, and Presentations: None**

**C. Consent Agenda:**

**C.1. Approval of Warrant**

a. July 24, 2023 Warrant

**C.2. Approval of Minutes**

a. July 10, 2023 City Commission Meeting Minutes

**C.3. Request Approval to Renew Agreement #2021-08 with Engineered Spray Solutions, LLC's (ESS) for Sanitary Sewer Manhole Inspections and Rehabilitation**

**D. Public Comments:**

Comments regarding items not on the Agenda. Citizens are encouraged to speak; however, comments are limited to four (4) minutes.

**E. Ordinances: (Legislative):**

**E.1. Ordinance 2023-13 Requesting the voluntary contraction of the City's Boundary for 42.6+/- acres of property located north of the intersection between State Hwy 11 and County Road 304 - Second Reading**

**E.2. Ordinance 2023-14 Requesting to voluntarily annex property totaling 0.51 +/- acres of land, owned by Coastal Collections LLC, located at 1138 County Road 305. - Second Reading**

**F. Resolutions: (Legislative): None**

**G. Old Business: None**

**H. New Business:**

**H.1.** Request Approval of Engineered Spray Solutions (ESS) FY2023 Ten (10) Manhole Rehab Project Proposal and Purchase Order

**H.2.** Setting the Maximum Millage Rate

**I. Reports:**

- **City Clerk**
- **Police Chief**
- **City Attorney**
- **City Manager**

City Manager Report- June 2023

- **Mayor and City Commissioners**

**J. Call for Adjournment.**

**This agenda is subject to change without notice. Please see posted copy at City Hall, and our website [www.BunnellCity.us](http://www.BunnellCity.us).**

**NOTICE:** If any person decides to appeal any decision made by the City Commission or any of its boards, with respect to any matter considered at any meeting of such boards or commission, he or she will need a record of the proceedings, and for this purpose he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based, 286.0105 Florida Statutes.

**Any person requiring a special accommodation at this meeting because of a disability or physical impairment should contact the City Clerk at (386) 437-7500 at least 48 hours prior to the meeting date.**

**THE CITY OF BUNNELL IS AN EQUAL OPPORTUNITY SERVICE PROVIDER.**

*Posted by City Clerk's office on July 17, 2023*



## City of Bunnell, Florida

### ATTACHMENTS:

Description  
Warrant 7/24/2023

Type  
Warrant



City of Bunnell, FL

# Expense Approval Register

Packet: APPKT08066 - 7.24.23 Warrant

(None)	Post Date	Vendor Name	Description (Item)	Account Number	Amount
<b>Vendor: Aaron's Bicycle Trail Shop Inc</b>					
	07/10/2023	Aaron's Bicycle Trail Shop Inc	Bicycle with racks	001-0521-521.5200	2,572.88
			<b>Vendor Aaron's Bicycle Trail Shop Inc Total:</b>		<b>2,572.88</b>
<b>Vendor: Advance Stores Company, Incorporated</b>					
	06/29/2023	Advance Stores Company, In...	2 cabin air filters	402-0534-534.4620	25.18
	07/10/2023	Advance Stores Company, In...	precision dvr st 10p 10	402-0534-534.5265	13.79
			<b>Vendor Advance Stores Company, Incorporated Total:</b>		<b>38.97</b>
<b>Vendor: Advanced Environmental Laboratories, Inc.</b>					
	07/01/2023	Advanced Environmental La...	Lab Services	404-0535-535.3400	4,755.72
			<b>Vendor Advanced Environmental Laboratories, Inc. Total:</b>		<b>4,755.72</b>
<b>Vendor: Ameris Bank</b>					
	07/01/2023	Ameris Bank	Garbage Truck	402-0534-534.7100	14,903.47
	07/01/2023	Ameris Bank	Garbage Truck	402-0534-534.7200	1,743.71
			<b>Vendor Ameris Bank Total:</b>		<b>16,647.18</b>
<b>Vendor: Austin King</b>					
	07/02/2023	Austin King	Safety Footwear Reimburse...	001-0549-549.5220	29.98
			<b>Vendor Austin King Total:</b>		<b>29.98</b>
<b>Vendor: Bunnell Auto Supply, Inc.</b>					
	06/29/2023	Bunnell Auto Supply, Inc.	1810 H R U-Joint	402-0534-534.4620	140.00
	07/07/2023	Bunnell Auto Supply, Inc.	Mig Wire	001-0549-549.5200	35.88
			<b>Vendor Bunnell Auto Supply, Inc. Total:</b>		<b>175.88</b>
<b>Vendor: Carbonfilt LLC</b>					
	06/30/2023	Carbonfilt LLC	Sand for Tertiary filters at ...	404-0535-535.5200	3,764.50
			<b>Vendor Carbonfilt LLC Total:</b>		<b>3,764.50</b>
<b>Vendor: Charter Communications</b>					
	07/01/2023	Charter Communications	100 Utility St	001-0512-512.4100	400.00
	07/07/2023	Charter Communications	604 E Moody Blvd 7.10.23-8....	001-0519-519.4100	109.88
	07/07/2023	Charter Communications	405 E Drain	001-0572-572.4100	104.99
	07/07/2023	Charter Communications	1769 E Moody Blvd 7.9.23-8....	001-0521-521.4100	124.98
			<b>Vendor Charter Communications Total:</b>		<b>739.85</b>
<b>Vendor: Computers at Work, Inc</b>					
	07/11/2023	Computers at Work, Inc	Security as a Service hours	001-0516-516.3400	5,000.00
	07/06/2023	Computers at Work, Inc	Advanced Gateway Security ...	001-0516-516.5230	844.59
			<b>Vendor Computers at Work, Inc Total:</b>		<b>5,844.59</b>
<b>Vendor: DG Hardware, Inc.</b>					
	06/27/2023	DG Hardware, Inc.	BULBS FOR WWTP, GENERA...	404-0535-535.5200	88.18
	06/29/2023	DG Hardware, Inc.	Pumps for WWTP	404-0535-535.4640	899.98
	06/29/2023	DG Hardware, Inc.	Copy key Suite 5	401-0533-533.5205	1.44
	06/29/2023	DG Hardware, Inc.	Copy key Suite 5	404-0535-535.5200	1.43
	07/12/2023	DG Hardware, Inc.	Super Glue	001-0521-521.5100	5.13
	07/03/2023	DG Hardware, Inc.	Toilet Flush Valve Kits (EJ Par...	001-0572-572.4610	73.41
	07/05/2023	DG Hardware, Inc.	Supplies to install two Wellpo..	404-0535-535.4640	195.90
	07/05/2023	DG Hardware, Inc.	Palm Terrace - 1" PVC ball va...	401-0533-533.5205	32.09
	07/07/2023	DG Hardware, Inc.	Fasteners to mount Vice	401-0533-533.4640	21.61
	07/07/2023	DG Hardware, Inc.	Fasteners to mount Vice	401-0533-533.5205	5.74
			<b>Vendor DG Hardware, Inc. Total:</b>		<b>1,324.91</b>
<b>Vendor: Dolphin Printing &amp; Design, Inc.</b>					
	06/29/2023	Dolphin Printing & Design, In...	1400 Solid Waste Flyers	402-0534-534.4700	336.00
			<b>Vendor Dolphin Printing &amp; Design, Inc. Total:</b>		<b>336.00</b>
<b>Vendor: Enterprise FM Trust - Enterprise Fleet Management Customer Billing</b>					
	06/28/2023	Enterprise FM Trust - Enterpr...	26TP5R	001-0549-549.4400	13,457.10

(None)	Post Date	Vendor Name	Description (Item)	Account Number	Amount
	06/28/2023	Enterprise FM Trust - Enterpr...	26TP5R	001-0549-549.4620	84.99
<b>Vendor Enterprise FM Trust - Enterprise Fleet Management Customer Billing Total:</b>					<b>13,542.09</b>
<b>Vendor: Environmental Land Services of Flagler County, Inc</b>					
	07/14/2023	Environmental Land Services...	Services for 7.7.23-7.13.23	402-0534-534.3400	4,827.87
	07/07/2023	Environmental Land Services...	Services for 6.30.23-7.6.23	402-0534-534.3400	4,391.37
<b>Vendor Environmental Land Services of Flagler County, Inc Total:</b>					<b>9,219.24</b>
<b>Vendor: Ferguson US Holdings, Inc</b>					
	06/06/2023	Ferguson US Holdings, Inc	PVC S40 SXS COUP	401-0533-533.5205	4.25
	06/06/2023	Ferguson US Holdings, Inc	PVC S40 SXS COUP	404-0535-535.5200	4.25
	07/10/2023	Ferguson US Holdings, Inc	Duplicate Invoice	401-0533-533.5264	-72.12
	07/10/2023	Ferguson US Holdings, Inc	Duplicate Invoice	404-0535-535.5264	-72.12
	07/03/2023	Ferguson US Holdings, Inc	2" PVC S40 Telescopic Coupli...	401-0533-533.5205	317.50
<b>Vendor Ferguson US Holdings, Inc Total:</b>					<b>181.76</b>
<b>Vendor: Flagler County Board of County Commissioners</b>					
	07/16/2023	Flagler County Board of Coun...	County Impact Fees - Apr - Ju...	001-2081200	323.84
	07/16/2023	Flagler County Board of Coun...	County Impact Fees - Apr - Ju...	001-2081300	5,265.84
	07/16/2023	Flagler County Board of Coun...	County Impact Fees - Apr - Ju...	001-2081400	1,798.84
	07/16/2023	Flagler County Board of Coun...	County Impact Fees - Apr - Ju...	001-2081500	2,187.84
<b>Vendor Flagler County Board of County Commissioners Total:</b>					<b>9,576.36</b>
<b>Vendor: Flagler County Clerk of Courts</b>					
	07/10/2023	Flagler County Clerk of Courts	Recording Division	001-0512-512.3300	88.00
	07/10/2023	Flagler County Clerk of Courts	Recording Division	001-0524-524.3300	18.50
<b>Vendor Flagler County Clerk of Courts Total:</b>					<b>106.50</b>
<b>Vendor: FLAGLER COUNTY SCHOOL BOARD</b>					
	07/16/2023	FLAGLER COUNTY SCHOOL B...	School Board Impact Fees - A...	001-2081100	20,380.52
<b>Vendor FLAGLER COUNTY SCHOOL BOARD Total:</b>					<b>20,380.52</b>
<b>Vendor: Flagler County Sheriff's Office</b>					
	07/07/2023	Flagler County Sheriff's Office	Aug 2023 Revenue Request	001-0521-521.3400	10,360.81
<b>Vendor Flagler County Sheriff's Office Total:</b>					<b>10,360.81</b>
<b>Vendor: Galls Parent Holdings, LLC</b>					
	06/18/2023	Galls Parent Holdings, LLC	Rain Jacket	001-0521-521.5220	75.17
	06/22/2023	Galls Parent Holdings, LLC	Rain pants & jacket for Harris	001-0521-521.5220	171.14
<b>Vendor Galls Parent Holdings, LLC Total:</b>					<b>246.31</b>
<b>Vendor: Gannett Media Corp</b>					
	07/20/2023	Gannett Media Corp	6.19.23-6.26.23 Advertising	402-0534-534.4800	322.68
<b>Vendor Gannett Media Corp Total:</b>					<b>322.68</b>
<b>Vendor: Global Tire Recycling of Sumter County, Inc</b>					
	05/10/2023	Global Tire Recycling of Sumt...	Tires	402-0534-534.3400	490.00
	05/11/2023	Global Tire Recycling of Sumt...	tires 1.47 tons	402-0534-534.3400	367.50
<b>Vendor Global Tire Recycling of Sumter County, Inc Total:</b>					<b>857.50</b>
<b>Vendor: Hawkins Inc</b>					
	06/28/2023	Hawkins Inc	Azone - EPA Reg. No. 7870-1	401-0533-533.5205	480.00
	06/28/2023	Hawkins Inc	Citric Acid 50% FG	401-0533-533.5205	6,047.25
	06/30/2023	Hawkins Inc	Chemicals for WWTP	404-0535-535.5200	1,153.40
	07/07/2023	Hawkins Inc	Chemicals for WWTP	404-0535-535.5200	528.00
	07/07/2023	Hawkins Inc	Chemicals for WTP	401-0533-533.5205	1,931.00
<b>Vendor Hawkins Inc Total:</b>					<b>10,139.65</b>
<b>Vendor: HD Supply Facilities Maintenance Ltd</b>					
	06/14/2023	HD Supply Facilities Mainten...	Replacement Stenner Pump	404-0535-535.4640	1,461.86
	07/07/2023	HD Supply Facilities Mainten...	Lift Station log books	404-0535-535.5200	282.68
<b>Vendor HD Supply Facilities Maintenance Ltd Total:</b>					<b>1,744.54</b>
<b>Vendor: Kerri A Uebel</b>					
	07/03/2023	Kerri A Uebel	STIHL 2hp cycle oil	001-0541-541.5200	33.98
<b>Vendor Kerri A Uebel Total:</b>					<b>33.98</b>

Expense Approval Register

(None)	Post Date	Vendor Name	Description (Item)	Account Number	Amount
<b>Vendor: Lowe's Companies, Inc</b>					
	07/05/2023	Lowe's Companies, Inc	Bench Vise to mount on our ...	401-0533-533.5265	132.05
<b>Vendor Lowe's Companies, Inc Total:</b>					<b>132.05</b>
<b>Vendor: MacData LLC</b>					
	06/30/2023	MacData LLC	E.Jurjo, A.Mckay, A.King	001-0549-549.4900	30.00
	06/30/2023	MacData LLC	E.Jurjo, A.Mckay, A.King	001-0572-572.4900	30.00
	06/30/2023	MacData LLC	E.Jurjo, A.Mckay, A.King	401-0533-533.4900	15.00
	06/30/2023	MacData LLC	E.Jurjo, A.Mckay, A.King	404-0535-535.4900	15.00
<b>Vendor MacData LLC Total:</b>					<b>90.00</b>
<b>Vendor: McMaster-Carr Supply Company</b>					
	06/29/2023	McMaster-Carr Supply Comp...	Injection quill, air fittings, du...	401-0533-533.4640	220.93
	06/29/2023	McMaster-Carr Supply Comp...	Injection quill, air fittings, du...	401-0533-533.5205	17.39
	06/29/2023	McMaster-Carr Supply Comp...	Replacement Bolts & repair fi...	401-0533-533.4640	370.13
<b>Vendor McMaster-Carr Supply Company Total:</b>					<b>608.45</b>
<b>Vendor: Medi-Quick Urgent Care</b>					
	07/03/2023	Medi-Quick Urgent Care	A.Mckay, A.King, B.Snead	001-0521-521.4900	285.00
	07/03/2023	Medi-Quick Urgent Care	A.Mckay, A.King, B.Snead	001-0549-549.4900	115.00
	07/03/2023	Medi-Quick Urgent Care	A.Mckay, A.King, B.Snead	001-0572-572.4900	115.00
<b>Vendor Medi-Quick Urgent Care Total:</b>					<b>515.00</b>
<b>Vendor: Michael Leo Dove</b>					
	07/13/2023	Michael Leo Dove	Services from 7.3.23-7.12.23	001-0524-524.3401	515.00
<b>Vendor Michael Leo Dove Total:</b>					<b>515.00</b>
<b>Vendor: NextEra Energy Inc</b>					
	04/29/2023	NextEra Energy Inc	50935-93118 April 2023	001-0519-519.4300	111.62
	06/30/2023	NextEra Energy Inc	02735-15254 June 2023	001-0519-519.4300	58.78
	07/07/2023	NextEra Energy Inc	01408-42220 July 2023	404-0535-535.4300	126.87
	07/07/2023	NextEra Energy Inc	04369-52212 July 2023	404-0535-535.4300	30.19
	07/07/2023	NextEra Energy Inc	04799-99278 July 2023	001-0519-519.4300	146.27
	07/07/2023	NextEra Energy Inc	05365-06116 July 2023	404-0535-535.4300	32.09
	07/07/2023	NextEra Energy Inc	06115-08987 June 2023	404-0535-535.4300	37.50
	07/07/2023	NextEra Energy Inc	08857-07703 July 2023	401-0533-533.4300	4,541.00
	07/07/2023	NextEra Energy Inc	009445-94365 July 2023	404-0535-535.4300	28.91
	07/07/2023	NextEra Energy Inc	14322-90094 July 2023	001-0572-572.4300	36.75
	07/07/2023	NextEra Energy Inc	16239-97200 July 2023	001-0541-541.4300	38.29
	07/07/2023	NextEra Energy Inc	16455-03937 June 2023	001-0541-541.4300	721.09
	07/07/2023	NextEra Energy Inc	16525-04919 June 2023	001-0541-541.4300	8,385.71
	07/07/2023	NextEra Energy Inc	16885-09957 June 2023	404-0535-535.4300	36.59
	07/07/2023	NextEra Energy Inc	19639-02331 July 2023	001-0521-521.4300	13.07
	07/07/2023	NextEra Energy Inc	23515-07823 July 2023	401-0533-533.4300	26.49
	07/07/2023	NextEra Energy Inc	24515-76322 July 2023	001-0572-572.4300	49.13
	07/07/2023	NextEra Energy Inc	25840-57588 July 2023	001-0541-541.4300	27.55
	07/07/2023	NextEra Energy Inc	26391-00821 July 2023	404-0535-535.4300	32.09
	07/07/2023	NextEra Energy Inc	27076-01973 June 2023	404-0535-535.4300	32.42
	07/07/2023	NextEra Energy Inc	27516-03917 June 2023	404-0535-535.4300	105.75
	07/07/2023	NextEra Energy Inc	28635-95142 July 2023	001-0572-572.4300	246.52
	07/07/2023	NextEra Energy Inc	29732-82177 July 2023	001-0521-521.4300	13.07
	07/07/2023	NextEra Energy Inc	34080-03816 July 2023	404-0535-535.4300	125.91
	07/07/2023	NextEra Energy Inc	37390-07957 July 2023	001-0541-541.4300	3,607.16
	07/07/2023	NextEra Energy Inc	37400-05982 July 2023	001-0541-541.4300	204.95
	07/07/2023	NextEra Energy Inc	38244-16469 July 2023	404-0535-535.4300	256.05
	07/07/2023	NextEra Energy Inc	39472-13538 July 2023	404-0535-535.4300	30.19
	07/07/2023	NextEra Energy Inc	46834-52215 July 2023	404-0535-535.4300	30.66
	07/07/2023	NextEra Energy Inc	47533-10046 July 2023	404-0535-535.4300	126.32
	07/07/2023	NextEra Energy Inc	48483-68421 July 2023	001-0519-519.4300	202.16
	07/07/2023	NextEra Energy Inc	48784-38110 July 2023	001-0519-519.4300	31.14
	07/07/2023	NextEra Energy Inc	50935-93118 June 2023	001-0519-519.4300	87.33
	07/07/2023	NextEra Energy Inc	51926-14112 June 2023	001-0519-519.4300	211.60
	07/07/2023	NextEra Energy Inc	56661-53118 June 2023	001-0519-519.4300	324.72
	07/07/2023	NextEra Energy Inc	56811-06810 July 2023	001-0541-541.4300	27.96

(None)	Post Date	Vendor Name	Description (Item)	Account Number	Amount
	07/07/2023	NextEra Energy Inc	56821-04848 July 2023	001-0541-541.4300	34.06
	07/07/2023	NextEra Energy Inc	56831-02874 July 2023	001-0541-541.4300	102.22
	07/07/2023	NextEra Energy Inc	59268-64496 July 2023	401-0533-533.4300	115.45
	07/07/2023	NextEra Energy Inc	60520-97182 July 2023	001-0541-541.4300	13.07
	07/07/2023	NextEra Energy Inc	66101-01831 July 2023	001-0572-572.4300	482.27
	07/07/2023	NextEra Energy Inc	66311-06884 July 2023	001-0541-541.4300	43.14
	07/07/2023	NextEra Energy Inc	67305-62219 July 2023	001-0541-541.4300	29.88
	07/07/2023	NextEra Energy Inc	67468-67586 July 2023	001-0541-541.4300	27.43
	07/07/2023	NextEra Energy Inc	68117-21478 July 2023	001-0541-541.4300	13.07
	07/07/2023	NextEra Energy Inc	69938-28117 July 2023	001-0521-521.4300	31.62
	07/07/2023	NextEra Energy Inc	76171-09884 July 2023	404-0535-535.4300	290.59
	07/07/2023	NextEra Energy Inc	79034-46115 July 2023	001-0521-521.4300	13.07
	07/07/2023	NextEra Energy Inc	82864-01883 July 2023	404-0535-535.4300	45.25
	07/07/2023	NextEra Energy Inc	90810-48119 July 2023	404-0535-535.4300	30.36
	07/07/2023	NextEra Energy Inc	93326-99348 July 2023	001-0521-521.4300	13.07
	07/07/2023	NextEra Energy Inc	95527-02467 July 2023	404-0535-535.4300	64.09
	07/07/2023	NextEra Energy Inc	99040-97517 July 2023	001-0519-519.4300	137.00
		<b>Vendor NextEra Energy Inc</b>		<b>Total:</b>	<b>21,629.54</b>
<b>Vendor: Nicholson A/C &amp; Heating, Inc.</b>					
	07/01/2023	Nicholson A/C & Heating, Inc.	Ice Machine Rental	001-0541-541.4400	130.00
		<b>Vendor Nicholson A/C &amp; Heating, Inc. Total:</b>			<b>130.00</b>
<b>Vendor: North America Fire Equipment Co Inc</b>					
	06/07/2023	North America Fire Equipme...	Class A Midnight Blue Pant B...	001-0521-521.5220	80.00
		<b>Vendor North America Fire Equipment Co Inc Total:</b>			<b>80.00</b>
<b>Vendor: Pace Analytical Services, LLC</b>					
	06/29/2023	Pace Analytical Services, LLC	Lab Testing	401-0533-533.3401	385.00
		<b>Vendor Pace Analytical Services, LLC Total:</b>			<b>385.00</b>
<b>Vendor: PPLSI Legal Shield</b>					
	07/17/2023	PPLSI Legal Shield	Balance from May & June	001-2185000	38.68
		<b>Vendor PPLSI Legal Shield Total:</b>			<b>38.68</b>
<b>Vendor: Rayco Funding &amp; Development, Inc</b>					
	06/29/2023	Rayco Funding & Developme...	Dewatering Box cleaned	404-0535-535.3400	1,575.00
	07/06/2023	Rayco Funding & Developme...	Clean Dewatering Box	404-0535-535.3400	1,575.00
		<b>Vendor Rayco Funding &amp; Development, Inc</b>	<b>Total:</b>		<b>3,150.00</b>
<b>Vendor: Rochelle Brown</b>					
	06/26/2023	Rochelle Brown	Rental Refund	001-2201000	125.00
		<b>Vendor Rochelle Brown Total:</b>			<b>125.00</b>
<b>Vendor: Rodney Geer</b>					
	07/07/2023	Rodney Geer	Colonial Refund for payment...	001-2185000	9.14
		<b>Vendor Rodney Geer Total:</b>			<b>9.14</b>
<b>Vendor: Rush Truck Centers of Florida Inc</b>					
	07/10/2023	Rush Truck Centers of Florida...	Sensor DEF Concentrate Truc...	402-0534-534.4620	505.00
		<b>Vendor Rush Truck Centers of Florida Inc Total:</b>			<b>505.00</b>
<b>Vendor: Safariland, LLC</b>					
	06/26/2023	Safariland, LLC	Concealment Paddle Holster	001-0521-521.5220	291.50
		<b>Vendor Safariland, LLC Total:</b>			<b>291.50</b>
<b>Vendor: SHI International Corp</b>					
	06/26/2023	SHI International Corp	Microsoft Project	401-0533-533.5230	135.93
	06/26/2023	SHI International Corp	Microsoft Project	404-0535-535.5230	135.93
	06/30/2023	SHI International Corp	Visio P2 GCC Per User License	001-0516-516.5230	67.97
		<b>Vendor SHI International Corp</b>	<b>Total:</b>		<b>339.83</b>
<b>Vendor: St. Augustine Electric Motor Works, Inc.</b>					
	07/06/2023	St. Augustine Electric Motor...	East BTU RAS pump replace...	404-0535-535.4640	1,354.81
		<b>Vendor St. Augustine Electric Motor Works, Inc. Total:</b>			<b>1,354.81</b>

## Expense Approval Register

Packet: APPKT08066 - 7.24.23 Warrant

(None)	Post Date	Vendor Name	Description (Item)	Account Number	Amount
<b>Vendor: Staples Inc</b>					
	07/13/2023	Staples Inc	Contract Base Finance	001-0516-516.3400	77.01
				<b>Vendor Staples Inc Total:</b>	<b>77.01</b>
<b>Vendor: Staples, Inc</b>					
	06/26/2023	Staples, Inc	Sticky notes, pens, staples. le...	001-0512-512.5100	167.75
	06/26/2023	Staples, Inc	Adding Machine for BTR	001-0512-512.5100	37.11
	07/04/2023	Staples, Inc	Refund Black High Yeild Ink	001-0521-521.5100	-33.79
	07/07/2023	Staples, Inc	East BTU RAS pump replace...	001-0521-521.5100	63.23
				<b>Vendor Staples, Inc Total:</b>	<b>234.30</b>
<b>Vendor: Stephano Giannini</b>					
	07/07/2023	Stephano Giannini	Colonial Refund for payment...	001-2185000	5.76
				<b>Vendor Stephano Giannini Total:</b>	<b>5.76</b>
<b>Vendor: Summit East Investors 1, LTD</b>					
	07/05/2023	Summit East Investors 1, LTD	Cheif Brannon 8.27-8.31	001-0521-521.4000	444.00
				<b>Vendor Summit East Investors 1, LTD Total:</b>	<b>444.00</b>
<b>Vendor: Sun Country Termite &amp; Pest Control</b>					
	05/06/2023	Sun Country Termite & Pest ...	604 E Moody Unit (6)	001-0519-519.3401	25.00
	06/05/2023	Sun Country Termite & Pest ...	300 Tolman St	001-0541-541.3400	40.00
	06/05/2023	Sun Country Termite & Pest ...	100 Utility Dr	401-0533-533.3401	30.00
	06/05/2023	Sun Country Termite & Pest ...	200 Tolman St	404-0535-535.3400	30.00
	06/05/2023	Sun Country Termite & Pest ...	200 S Church St	001-0572-572.3400	37.00
	06/05/2023	Sun Country Termite & Pest ...	604 E Moody Unit (4)	001-0519-519.3401	25.00
	06/05/2023	Sun Country Termite & Pest ...	PD Office	001-0519-519.3401	50.00
	06/05/2023	Sun Country Termite & Pest ...	604 E Moody (5)	401-0533-533.3401	12.50
	06/05/2023	Sun Country Termite & Pest ...	604 E Moody (5)	404-0535-535.3400	12.50
	06/06/2023	Sun Country Termite & Pest ...	405 E Drain St	001-0572-572.3400	30.00
	06/06/2023	Sun Country Termite & Pest ...	300 Citrus St	001-0572-572.3400	40.00
	06/06/2023	Sun Country Termite & Pest ...	401 E Court St	001-0572-572.3400	75.00
	06/06/2023	Sun Country Termite & Pest ...	Carver Fields	001-0572-572.3400	75.00
	06/06/2023	Sun Country Termite & Pest ...	Heritage Park	001-0572-572.3400	25.00
	06/06/2023	Sun Country Termite & Pest ...	Jackson Park	001-0572-572.3400	30.00
	06/06/2023	Sun Country Termite & Pest ...	1307 E Howe St	001-0572-572.3400	40.00
				<b>Vendor Sun Country Termite &amp; Pest Control Total:</b>	<b>577.00</b>
<b>Vendor: Tara A. Fisher</b>					
	07/12/2023	Tara A. Fisher	Emergency Repair- PD HVAC	001-0519-519.4610	2,824.00
				<b>Vendor Tara A. Fisher Total:</b>	<b>2,824.00</b>
<b>Vendor: Terry Taylor Ford Company</b>					
	07/05/2023	Terry Taylor Ford Company	Oil Change Unit 1901	001-0521-521.4620	59.99
				<b>Vendor Terry Taylor Ford Company Total:</b>	<b>59.99</b>
<b>Vendor: Tyler Technologies</b>					
	06/30/2023	Tyler Technologies	Transaction Fees-Utility Billing	401-0533-533.4900	2,433.73
	06/30/2023	Tyler Technologies	Transaction Fees-Utility Billing	402-0534-534.4900	2,433.01
	06/30/2023	Tyler Technologies	Transaction Fees-Utility Billing	404-0535-535.4900	2,433.01
	06/30/2023	Tyler Technologies	Subscription-Utility Billing No...	401-0533-533.4900	86.42
	06/30/2023	Tyler Technologies	Subscription-Utility Billing No...	402-0534-534.4900	86.46
	06/30/2023	Tyler Technologies	Subscription-Utility Billing No...	404-0535-535.4900	86.42
				<b>Vendor Tyler Technologies</b>	<b>Total: 7,559.05</b>
<b>Vendor: UniFirst Corporation</b>					
	07/05/2023	UniFirst Corporation	Uniform Rental	001-0541-541.5220	30.59
	07/05/2023	UniFirst Corporation	Uniform Rental	001-0549-549.5220	6.26
	07/05/2023	UniFirst Corporation	Uniform Rental	001-0572-572.5200	21.39
	07/05/2023	UniFirst Corporation	Uniform Rental	001-0572-572.5220	20.54
	07/05/2023	UniFirst Corporation	Uniform Rental	401-0533-533.5220	35.91
	07/05/2023	UniFirst Corporation	Uniform Rental	402-0534-534.5220	17.92
	07/05/2023	UniFirst Corporation	Uniform Rental	404-0535-535.5220	34.50
				<b>Vendor UniFirst Corporation Total:</b>	<b>167.11</b>



## Expense Approval Register

Packet: APPKT08066 - 7.24.23 Warrant

(None)	Post Date	Vendor Name	Description (Item)	Account Number	Amount
<b>Vendor: Ver-E-Safe Solutions, LLC</b>					
	06/29/2023	Ver-E-Safe Solutions, LLC	XL Gloves, XXL Gloves	401-0533-533.5205	478.50
				<b>Vendor Ver-E-Safe Solutions, LLC Total:</b>	<b>478.50</b>
<b>Vendor: Volusia Reporting Company</b>					
	07/12/2023	Volusia Reporting Company	Executive Strategy Session Tr...	001-0511-511.4900	567.80
				<b>Vendor Volusia Reporting Company Total:</b>	<b>567.80</b>
<b>Vendor: Wells Fargo Financial Leasing, Inc</b>					
	06/17/2023	Wells Fargo Financial Leasing,...	Contract 450-7740208-004 6...	001-0512-512.4400	110.99
	06/17/2023	Wells Fargo Financial Leasing,...	Contract 450-7740208-004 6...	001-0513-513.4400	110.99
	06/17/2023	Wells Fargo Financial Leasing,...	Contract 450-7740208-004 6...	001-0521-521.4400	110.99
	06/17/2023	Wells Fargo Financial Leasing,...	Contract 450-7740208-004 6...	001-0524-524.4400	111.00
	06/29/2023	Wells Fargo Financial Leasing,...	Contract 450-0047920-000 7...	001-0541-541.4400	37.65
	06/29/2023	Wells Fargo Financial Leasing,...	Contract 450-0047920-000 7...	401-0533-533.4400	37.66
	06/29/2023	Wells Fargo Financial Leasing,...	Contract 450-0047920-000 7...	404-0535-535.4400	37.66
				<b>Vendor Wells Fargo Financial Leasing, Inc Total:</b>	<b>556.94</b>
				<b>Grand Total:</b>	<b>156,392.86</b>

## Fund Summary

Fund	Expense Amount
001 - GENERAL FUND	86,130.61
401 - WATER	17,842.85
402 - SOLID WASTE	30,603.96
404 - SEWER	21,815.44
<b>Grand Total:</b>	<b>156,392.86</b>

## Account Summary

Account Number	Account Name	Expense Amount
001-0511-511.4900	Other Current Chgs & Ob...	567.80
001-0512-512.3300	Recording Fees	88.00
001-0512-512.4100	Communications Expense	400.00
001-0512-512.4400	Rentals/Leases	110.99
001-0512-512.5100	Office Supplies Expenses	204.86
001-0513-513.4400	Rental / Lease Expense	110.99
001-0516-516.3400	Other Contract Services	5,077.01
001-0516-516.5230	Software	912.56
001-0519-519.3401	Other Contractual Servic...	100.00
001-0519-519.4100	Communications Expense	109.88
001-0519-519.4300	Utilities	1,310.62
001-0519-519.4610	Repairs & Maint. - Buildi...	2,824.00
001-0521-521.3400	Other Contract Services	10,360.81
001-0521-521.4000	Travel / Per Diem	444.00
001-0521-521.4100	Communications Expense	124.98
001-0521-521.4300	Utility - Public Services	83.90
001-0521-521.4400	Rental / Lease Expense	110.99
001-0521-521.4620	Repair / Maint - Vehicles	59.99
001-0521-521.4900	Other Current Chgs & Ob...	285.00
001-0521-521.5100	Office Supplies Expenses	34.57
001-0521-521.5200	Operating Supplies	2,572.88
001-0521-521.5220	Uniforms Exp	617.81
001-0524-524.3300	Recording Fees	18.50
001-0524-524.3401	Bldg / Fire Inspection Exp..	515.00
001-0524-524.4400	Rental / Lease Expense	111.00
001-0541-541.3400	Other Contract Services	40.00
001-0541-541.4300	Utility - Public Services	13,275.58
001-0541-541.4400	Rental / Lease Expense	167.65
001-0541-541.5200	Operating Supplies	33.98
001-0541-541.5220	Uniforms Exp	30.59
001-0549-549.4400	Rentals & Leases	13,457.10
001-0549-549.4620	Repair/Maint - Vehicles	84.99
001-0549-549.4900	Other Current Charges	145.00
001-0549-549.5200	Operating Supplies	35.88
001-0549-549.5220	Uniforms	36.24
001-0572-572.3400	Other Contract Services	352.00
001-0572-572.4100	Communications Expense	104.99
001-0572-572.4300	Utility - Public Services	814.67
001-0572-572.4610	Repair / Maint - Bldgs	73.41
001-0572-572.4900	Other Current Chgs & Ob...	145.00
001-0572-572.5200	Operating Supplies	21.39
001-0572-572.5220	Uniforms Exp	20.54
001-2081100	School Impact Fees	20,380.52
001-2081200	County EMS Impact Fees	323.84
001-2081300	County Fire Impact Fees	5,265.84
001-2081400	County Library Impact F...	1,798.84
001-2081500	County Parks Impact Fees	2,187.84
001-2185000	125 Plans Employee Pay...	53.58
001-2201000	Deposits Paybl - CtyHall/...	125.00
401-0533-533.3401	Other Contract Services	427.50
401-0533-533.4300	Utility - Public Services	4,682.94

**Account Summary**

<b>Account Number</b>	<b>Account Name</b>	<b>Expense Amount</b>
401-0533-533.4400	Rental / Lease Expense	37.66
401-0533-533.4640	Repair / Maint - Equipm...	612.67
401-0533-533.4900	Other Current Chgs & Ob...	2,535.15
401-0533-533.5205	Operating Supplies Exp -...	9,315.16
401-0533-533.5220	Uniforms Exp	35.91
401-0533-533.5230	Software	135.93
401-0533-533.5264	Small Equipment Purcha...	-72.12
401-0533-533.5265	Tools	132.05
402-0534-534.3400	Other Contract Services -...	10,076.74
402-0534-534.4620	Repair/Maint Vehicles - ...	670.18
402-0534-534.4700	Printing & Binding - Solid...	336.00
402-0534-534.4800	Advertisement - Solid W...	322.68
402-0534-534.4900	Other Current Charges - ...	2,519.47
402-0534-534.5220	Uniforms - Solid Waste	17.92
402-0534-534.5265	Tools	13.79
402-0534-534.7100	Debt Service Principal - ...	14,903.47
402-0534-534.7200	Debt Service Interest - So..	1,743.71
404-0535-535.3400	Other Contractual Servic...	7,948.22
404-0535-535.4300	Utilities	1,461.83
404-0535-535.4400	Rentals/Leases	37.66
404-0535-535.4640	Repairs & Maint. - Equi...	3,912.55
404-0535-535.4900	Other Current Charges &...	2,534.43
404-0535-535.5200	Operating Supplies	5,822.44
404-0535-535.5220	Uniforms	34.50
404-0535-535.5230	Software	135.93
404-0535-535.5264	Small Equipment	-72.12
	<b>Grand Total:</b>	<b>156,392.86</b>

**Project Account Summary**

<b>Project Account Key</b>	<b>Expense Amount</b>
**None**	156,392.86
<b>Grand Total:</b>	<b>156,392.86</b>



## City of Bunnell, Florida

### ATTACHMENTS:

Description

Proposed Minutes

Type

Minutes

CATHERINE D. ROBINSON  
MAYOR

JOHN ROGERS  
VICE-MAYOR

DR. ALVIN B. JACKSON, JR  
CITY MANAGER



**COMMISSIONERS:**

TONYA GORDON

TINA-MARIE SCHULTZ

PETE YOUNG

## **BUNNELL CITY COMMISSION MEETING**

**Monday, July 10, 2023**

**7:00 PM**

1769 East Moody Boulevard (GSB)

Chambers Room

Bunnell, FL 32110

### **A. Call Meeting to Order and Pledge Allegiance to the Flag**

Vice Mayor Rogers called the meeting to order at 7:00 PM and led the Pledge to the Flag.

**Roll Call:** Vice Mayor Johns Rogers; Commissioner Tonya Gordon; Commissioner Tina-Marie Schultz; Commissioner Pete Young; City Attorney Paul Waters; City Manager Alvin B. Jackson; Community Development Director Bernadette Fisher; Finance Director Kristi Moss; Infrastructure Director Dustin Vost; City Clerk Kristen Bates; Deputy City Clerk Bridgitte Gunnells

**Excused:** Mayor Catherine Robinson

### **Invocation for Our Military Troops and National Leaders:**

Daisy Henry led the invocation.

### **B. Introductions, Commendations, Proclamations, and Presentations:**

#### **B.1. Proclamation: Christmas Come True Month**

The Proclamation was read into record by Commissioner Schultz. Nadine King was present to accept the proclamation.

#### **B.2. Presentation: Live Local Act**

Devrie Paradowski, Housing Service Program Manager with Flagler County Health and Human Service Department, presented the item to the Board and spoke to the changes made to affordable housing during the last legislative session.

#### **B.3. Presentation: Recognition of 10 Years of Service for Sergeant Shane Groth**

Chief Brannon presented Sgt. Shane Groth with a Certificate of Appreciation and a Letter of Commendation for 10 years of service to the City of Bunnell.

### **C. Consent Agenda:**

#### **C.1. Approval of Warrant**

##### **a. July 10, 2023 Warrant**

#### **C.2. Approval of Minutes**

**a. June 26, 2023 City Commission Meeting Minutes**

**C.3. Request Approval of One Year Extension of Contract #2020-13 with Crowder Gulf.**

**Motion:** Approve the Consent Agenda

**Motion by:** Commissioner Schutz

**Second by:** Commissioner Young

**Board Discussion:** None

**Public Discussion:** None

**Vote:** Motion carried unanimously

**D. Public Comments:**

**Comments regarding items not on the agenda. Citizens are encouraged to speak; however, comments are limited to four (4) minutes.**

None

**E. Ordinances: (Legislative):**

**E.1 . Ordinance 2023-13 Requesting the voluntary contraction of the City's Boundary for 42.6+/- acres of property located north of the intersection between State Hwy 11 and County Road 304 - First Reading**

City Attorney Waters read the short title into the record. Attorney Waters also advised the Board this was a quasi-judicial hearing, and any ex parte communications must be disclosed. Vice Mayor Rogers, Commissioner Schultz and Commissioner Young all disclosed contact with the applicant, Ms. Palmer.

**Motion:** Approve Ordinance 2023-13 Requesting the voluntary contraction of the City's Boundary for 42.6+/- acres of property located north of the intersection between State Hwy 11 and County Road 304 - First Reading

**Motion by:** Commissioner Young

**Second by:** Commissioner Schultz

**Board Discussion:** Commissioner Young reported he spoke with Ms. Palmer and listened to her side of the story. He reported the history of the property reported to him by Mr. Palmer. He feels this request should be granted. Commissioner Schultz stated she had discussed a couple of other options with the applicant; the City will most likely be expanding utilities past their property within the next five years. If the house is not within the City limits, the connection to water and sewer would be their responsibility.

**Public Discussion:** Ms. Katherine Palmer was sworn in by Attorney Waters. Ms. Palmer stated the option to keep a portion of the property in the City was not financially feasible based on the costs to get surveying done and their current mortgage. She has already paid costs to get the property rezoned to allow her to obtain the permit for building her house. At this time, they wish to proceed with the contraction.

**Vote:** Motion carried unanimously

**E.2. Ordinance 2023-14 Requesting to voluntarily annex property totaling 0.51 +/- acres of land, owned by Coastal Collections LLC, located at 1138 County Road 305. - First Reading**

City Attorney Waters read the short title into the record.

**Motion:** Approve Ordinance 2023-14 Requesting to voluntarily annex property totaling 0.51 +/- acres of land, owned by Coastal Collections LLC, located at 1138 County Road 305. - First Reading

**Motion by:** Commissioner Schultz

**Second by:** Commissioner Young

**Board Discussion:** None

**Public Discussion:** None

**Vote:** Motion carried unanimously

**F. Resolutions: (Legislative): None**

**G. Old Business: None**

**H. New Business:**

**H.1 Request Approval of the RFQ 2023-02 Selection Committee Recommendation to Proceed with Contract Negotiations for Continuing Infrastructure Engineering Services**

Infrastructure Director Vost introduced this item. The City released a Request for Qualifications (RFQ). The bid submittals were turned in and scored by members of the Selection Committee. As each firm provides a service that could be utilized by the City, permission to proceed with contract negotiations with all firms was requested.

**Motion:** Approve the Request to engage in contract negotiations for Infrastructure Engineering Services with all eight firms.

**Motion by:** Commissioner Schultz

**Second by:** Commissioner Gordon

**Board Discussion:** None

**Public Discussion:** None

**Vote:** Motion carried unanimously

**I. Reports:**

- **City Clerk** – asked the Board to hold the dates of August 7<sup>th</sup> and August 17<sup>th</sup> for Budget Workshop meetings. The meetings will begin at 6:00 PM.
- **Police Chief**- reported statistics for the month of June. He also stated he has been attending meetings with the Department of Veterans Affairs and Flagler County to have a Veteran's Day Parade this year in Bunnell.
- **City Attorney**- None
- **City Manager**- reported on an Emergency Purchase Order that had to be approved for repairs to the Police Department HVAC unit.
- **Mayor and City Commissioners**
  - **Commissioner Schultz** – a number of citizens have approached her about the new City Hall. They are interested in purchasing bricks for a pathway or a feature wall at the new complex. She thinks the City should explore this program as many people would be interested in making this purchase. Another option would be allowing citizens to purchase and dedicate benches for a courtyard.
  - **Commissioner Gordon** – None
  - **Commissioner Young** – likes the idea of having a parade in Bunnell.
  - **Vice Mayor Rogers**- None

**J. Call for Adjournment.**

**Motion:** Adjourn

**Motion by:** Commissioner Gordon

**Seconded by:** Commissioner Schultz

**Vote:** Motion carried unanimously

Meeting adjourned at 7:46 PM

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Catherine D. Robinson, Mayor

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Kristen Bates, CMC, City Clerk

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Date

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Date

***\*\*The City adopts summary minutes. Audio files in official City records are retained according to the Florida Department of State GS1-SL records retention schedule\*\****





## City of Bunnell, Florida

### Agenda Item No. C.3.

Document Date: 7/6/2023 Amount:  
Department: Infrastructure Account #:  
Subject: Request Approval to Renew Agreement #2021-08 with Engineered Spray Solutions, LLC's (ESS) for Sanitary Sewer Manhole Inspections and Rehabilitation  
Agenda Section: Consent Agenda:  
Goal/Priority: Infrastructure

#### ATTACHMENTS:

Description	Type
Mutual Consent Agreement -Second Amendment	Contract
St. Augustine Renewal	Contract
Mutual Consent agreement 2021-08	Contract
St. Augustine Agreement	Contract

#### Summary/Highlights:

ESS has been providing its manhole inspections and rehabilitation services to the City with excellent results. Staff would like to continue using their services and is seeking to renew Agreement #2021-08 for an additional two (2) year term.

#### Background:

The City of Bunnell's adopted Master Plan includes an annual budget for Gravity Sewer Renewal and Rehabilitation which includes manhole inspections, lining and rehab.

The City of St. Augustine solicited competitive, sealed proposals from qualified companies to perform and document inspections that include recommended rehabilitations to existing Sanitary Sewer Manholes. On March 22, 2021, Commission approved Agreement #2021-08 to piggyback Contract #PW2020-05 for Sanitary Sewer Manhole Inspections and Rehabilitation between Engineered Spray Solutions, LLC and the City of St. Augustine. Commission approved the first renewal on September 27, 2021.

The City of St. Augustine renewed their agreement with ESS for an additional two (2) year term beginning October 1, 2023 and ending September 30, 2025.

**Staff Recommendation:**

Approve to renew Agreement #2021-08 with Engineered Spray Solutions, LLC's for sanitary sewer manhole inspections and rehabilitation for an additional two (2) year term.

**City Attorney Review:**

Approved

**Finance Department Review/Recommendation:**

**City Manager Review/Recommendation:**

Approved for the agenda

**CONTRACT NO. 2021-08**

**SECOND AMENDMENT TO LETTER AGREEMENT FOR  
SANITARY SEWER MANHOLE INSPECTIONS AND REHABILITATION SERVICE  
BETWEEN ENGINEERED SPRAY SOLUTIONS, LLC, AND  
CITY OF BUNNELL, FLORIDA**

**THIS SECOND AMENDMENT** is made on this 24<sup>th</sup> date of July, 2023 to that certain Letter Agreement ("Agreement") entered into by and between Engineered Spray Solutions, LLC, a foreign limited liability company authorized to do business in the State of Florida, ("Contractor"), 1306 Banana Road, Lakeland, FL 33810, and the City of Bunnell ("City of Bunnell"), a municipal corporation organized and existing under the laws of the State of Florida, whose address is 604 East Moody Boulevard, Suite 6 Bunnell, Florida 32110, effective as of October 1, 2023.

**WHEREAS**, Contractor executed Sanitary Sewer Manhole Inspections and Rehabilitation Contract No. RFP #PW2020-05 ("Contract No. RFP #PW2020-05") with the City of St. Augustine, Florida effective on October 9, 2020; and

**WHEREAS**, the City of St. Augustine is a local government unit in the State of Florida and functions as a municipal corporation; and

**WHEREAS**, Section 163.01, Florida Statutes, also referred to as the Florida Interlocal Cooperation Act, permits local governments to cooperate with other localities, on the basis of mutual advantage; and

**WHEREAS**, the City of Bunnell was and continues to be in need of sanitary sewer manhole inspections and rehabilitation services similar to the services Contractor is providing to the City of St. Augustine, which would allow manhole lining and rehabilitation services; and

**WHEREAS**, Section 2-118(b) of the City of Bunnell Code of Ordinances provides that when it is in the best interest of the City, the City may cooperatively purchase from any other government agency, which has competitively bid and awarded any contract for any product or service at the awarded price, if the original bid specifications and award allow it and if the other governmental agency's procurement complies with the City of Bunnell's competitive bid policy; and

**WHEREAS**, the Bunnell City Commission found Contract No. RFP #PW2020-05 was competitively bid by the City of St. Augustine with procedural guarantees of fairness and competitiveness equivalent to those of the City of Bunnell; 2) the Contractor authorized the City of Bunnell to "piggyback" on the competitive pricing provided to the City of St. Augustine in Contract No. RFP #PW2020-05; and 3) it was in the best interest of the residents of the City of Bunnell to enter into an agreement with Contractor containing similar terms and conditions as contained Contract No. RFP #PW2020-05; and

**WHEREAS**, the parties agreed and consented to "piggyback" on the rates/prices and terms and conditions in Contract No. RFP #PW2020-05, including all attachments, addenda, unit prices, and all other applicable documents; and

**WHEREAS**, although the term of the executed Agreement is due to expire on September 30, 2023, the Agreement also includes an option for the City to extend the term for an additional two (2) year term; and

**WHEREAS**, due to Contractor's past performance, the City desires to extend the term of the Agreement for an additional two (2) year term.

**NOW THEREFORE**, in consideration of the mutual covenants herein contained, the parties agree as follows:

- 1. **Incorporation by Reference.** The foregoing WHEREAS clauses are incorporated by reference.
- 2. **Term.** The term of the Agreement between the parties is hereby extended to September 30, 2025 by this Second Amendment.
- 3. **Effective Date.** This amendment shall be effective as of October 1, 2023.

**IN WITNESS WHEREOF**, the parties hereto have executed and delivered this instrument on the days and year indicated below and the signatories below to bind the parties set forth herein.

**ENGINEERED SPRAY SOLUTIONS, LLC**

Print Name: James J. Collier

Title: Authorized Rep.

STATE OF Florida  
COUNTY OF Polk

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this 6th day of July, 2023, by Jim Collier of ESS, a Florida corporation, on behalf of the corporation, and he/she is personally known to me or has produced (type of identification) as identification.

Mariah Muñoz  
Signature of Notary Public - State of Florida

Mariah Muñoz  
Printed/Typed/Stamped Name of Notary  
My commission expires:



**CITY OF BUNNELL**

\_\_\_\_\_  
Catherine D. Robinson, Mayor

Date: \_\_\_\_\_

Approved as to Legal Form

\_\_\_\_\_  
Vose Law Firm, City Attorney

**ATTEST:**

\_\_\_\_\_  
Kristen Bates, City Clerk

SEAL:

**SECOND RENEWAL OF THE AGREEMENT BETWEEN  
THE CITY OF ST. AUGUSTINE  
AND ENGINEERED SPRAY SOLUTIONS LLC FOR SANITARY SEWER MANHOLE  
INSPECTIONS AND REHABILITATION PROJECT**

THIS RENEWAL AGREEMENT is entered into by and between the CITY OF ST. AUGUSTINE (the "City"), whose mailing address is P. O. Box 210, St. Augustine, Florida 32085, and ENGINEERED SPRAY SOLUTIONS LLC, ("Contractor"), whose address is 1306 Banana Road, Lakeland, Florida 33810.

The City entered into an Agreement with Contractor on October 9, 2020 for Sanitary Sewer Manhole Inspections and Rehabilitation Project for a term ending on September 30, 2021. The Agreement included the option to renew up to four (4) consecutive years. On August 11, 2021, the Agreement was renewed for an additional two (2) year term, October 01, 2021 through September 30, 2023. The City and Contractor now desire to renew the Agreement for an additional two (2) year term, October 1, 2023 through September 30, 2025 (Renewal #2).

In consideration of the mutual covenants contained herein and for other good and valuable consideration, the parties agree to the following:

1. The Agreement, Contract No. PW2020-05, is renewed for an additional two (2) year term beginning October 1, 2023 and ending September 30, 2025. For satisfactory performance of the Work outlined in the Contract during this additional term period, the City agrees to pay Contractor in accordance with the Agreement's Cost Schedule.

All other terms and conditions of the Agreement are hereby ratified and continue in full force and effect.

\*\*\*SIGNATURES APPEAR ON THE FOLLOWING PAGE\*\*\*

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate, each of which shall be deemed an original on the day and year first above written.

CITY OF ST. AUGUSTINE,  
FLORIDA a municipal corporation

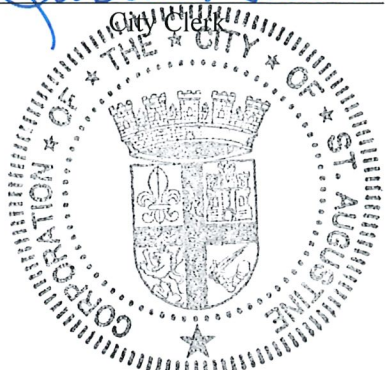
ATTEST:

Name: *Darlene Salambos*  
City Clerk

By: *J.P. Regan*

Printed Name: John P. Regan

(SEAL)



Title: City Manager

Date: 5/26/23

ENGINEERED SPRAY SOLUTIONS LLC

Signed, sealed and delivered  
in the presence of:

*Jim Collier*  
Witness

Printed Name: Jim Collier

By: *[Signature]*  
Jim Collier (May 25, 2023 09:32 EDT)

Printed Name: Jim Collier

*Adam Webb*  
Adam Webb (May 25, 2023 09:37 EDT)  
Witness

Title: Authorized rep/project manager

Printed Name: Adam Webb

Date: May 25, 2023

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

*[Signature]* *JCS*  
Isabelle C. Lopez, City Attorney

**MUTUAL CONSENT AGREEMENT #2021-08 FOR  
SANITARY SEWER MANHOLE INSPECTIONS AND REHABILITATION  
BETWEEN ENGINEERED SPRAY SOLUTIONS, LLC AND  
CITY OF BUNNELL, FLORIDA**

**THIS AGREEMENT** is made and entered into by and between Engineered Spray Solutions, LLC, a Florida limited liability company ("Contractor"), 1306 Banana Road, Lakeland, Florida 33810, and the City of Bunnell ("City of Bunnell"), a municipal corporation organized and existing under the laws of the State of Florida, whose address is 201 West Moody Boulevard, Bunnell, Florida 32110.

**WHEREAS**, Contractor executed Sanitary Sewer Manhole Inspections and Rehabilitation Contract No. RFP #PW2020-05 ("Contract No. RFP #PW2020-05") with the City of St. Augustine, Florida effective on October 9, 2020; and

**WHEREAS**, the City of St. Augustine is a local government unit in the State of Florida and functions as a municipal corporation; and

**WHEREAS**, Section 163.01, Florida Statutes, also referred to as the Florida Interlocal Cooperation Act, permits local governments to cooperate with other localities, on the basis of mutual advantage; and

**WHEREAS**, the City of Bunnell is in need of sanitary sewer manhole inspections and rehabilitation services similar to the services Contractor is providing to the City of St. Augustine, which would allow manhole lining services; and

**WHEREAS**, Section 2-118(b) of the City of Bunnell Code of Ordinances provides that when it is in the best interest of the City, the City may cooperatively purchase from any other government agency, which has competitively bid and awarded any contract for any product or service at the awarded price, if the original bid specifications and award allow it and if the other governmental agency's procurement complies with the City of Bunnell's competitive bid policy; and

**WHEREAS**, a complete copy of the City of St. Augustine's original Bid/RFP, a copy of the City of St. Augustine's award letter, memo, agenda item to the Contractor and a copy of the Contractor's proposal has been provided as required by Section 2-118(b) of the City of Bunnell Code of Ordinances; and

**WHEREAS**, the Bunnell City Commission finds Contract No. RFP #PW2020-05 was competitively bid with procedural guarantees of fairness and competitiveness equivalent to those of the City of Bunnell; 2) the Contractor authorized the City of Bunnell to "piggyback" on the competitive pricing provided to the City of St. Augustine in Contract No. RFP #PW2020-05; and 3) it is in the best interest of the residents of the City of Bunnell to enter into an agreement with Contractor containing similar terms and conditions as contained Contract No. RFP #PW2020-05; and

**WHEREAS**, Bunnell City Commission further finds the criteria in Section 2-118(b) of the Bunnell Code of Ordinances is satisfied and the parties hereby agree and consent



to “piggyback” on the rates/prices and terms and conditions in Contract No. RFP #PW2020-05, including all attachments, addenda, unit prices, and all other applicable documents except as otherwise provided herein.

**NOW THEREFORE**, in consideration of the mutual covenants herein contained, the parties agree as follows:

1. **Incorporation by Reference.** The foregoing WHEREAS clauses are incorporated by reference.

2. **Standard Terms.** The terms and conditions of Contract No. RFP #PW2020-05, including all attachments, addenda, unit prices, and all other applicable documents except as otherwise provided herein shall by reference constitute the terms and conditions of this Agreement. In the event of a conflict between the terms and conditions of Contract No. RFP #PW2020-05 and this Agreement, the terms and conditions contained in this Agreement shall prevail.

3. **Public Records.** IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE FIRE INSPECTOR’S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (386) 437-7500, [kbates@bunnellcity.us](mailto:kbates@bunnellcity.us), 201 W. Moody Blvd, Bunnell, FL 32110.

4. **Public Records Compliance Indemnification.** Contractor agrees to indemnify and hold the City of Bunnell harmless against any and all claims, damage awards, and causes of action arising from Contractor’s failure to comply with the public records disclosure requirements of Section 119.07(1), Florida Statutes, or by Contractor’s failure to maintain public records that are exempt or confidential and exempt from the public records disclosure requirements, including, but not limited to, any third party claims or awards for attorneys’ fees and costs arising therefrom. Contractor authorizes the City of Bunnell to seek declaratory, injunctive, or other appropriate relief against Contractor in Flagler County Circuit Court on an expedited basis to enforce the requirements of this term.

5. **Compliance/Consistency with Section 768.28, Fla. Stat.** Any indemnification provided by the City of Bunnell specified in the Agreement shall not be construed as a waiver of the City of Bunnell’s sovereign immunity, and shall be limited to such indemnification and liability limits consistent with the requirements of Section 768.28, Fla. Stat. and subject to the procedural requirements set forth therein. Any other purported indemnification by the City of Bunnell in the Agreement in derogation hereof shall be void and of no force or effect.

6. **Insurance.** The City of Bunnell shall be substituted for the City of St. Augustine in all insurance matters contained in Section 12 of Contract No. RFP #PW2020-05 and specifically listed as an additional insured on all required insurance policies. The Certificate of Insurance shall designate the City of Bunnell as a certificate holder as follows:

City of Bunnell  
Attention: City Manager  
201 W. Moody Blvd.  
Bunnell, FL 32110

7. **Notice.** Notice, as addressed in Section 14 of Contract No. RFP #PW2020-05, when required to be provided to the City of Bunnell shall be provided to the City Manager.

8. **Payment.** The City of Bunnell shall pay Contractor in accordance with the City of Bunnell's finance policy and Florida law at the rates contained in Contract No. RFP #PW2020-05.

9. **Mediation.** Each party shall pay for any costs it incurs related to mediation, with the exception of the fee for the mediator's services, which shall be paid equally by both parties. Neither party shall be responsible for payment of a mediator's travel expenses unless otherwise agreed to in writing.

10. **Venue and Jurisdiction.** Notwithstanding any of other provision to the contrary, this Agreement and the parties' actions under this Agreement shall be governed by and construed under the laws of the State of Florida, without reference to conflict of law principles. As a material condition of this Agreement, each Party hereby irrevocably and unconditionally consents to submit and does submit to the jurisdiction of the Circuit Court in and for Flagler County, Florida for any actions, suits or proceedings arising out of or relating to this Agreement.

11. **Contact Person.** The primary contact person under this Agreement for the City of Bunnell shall be Dustin Vost, PO Box 756, Bunnell, Florida 32110, (386) 437-7515, [dvost@bunnellcity.us](mailto:dvost@bunnellcity.us).

12. **E-Verify Compliance.** Contractor affirmatively states, under penalty of perjury, that in accordance with Section 448.095, Fla. Stat., Contractor is registered with and uses the E-Verify system to verify the work authorization status of all newly hired employees, that in accordance with such statute, Contractor requires from each of its subcontractors an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and that Contractor is otherwise in compliance with Sections 448.09 and 448.095, Fla. Stat.

13. **Compliance/Consistency with Scrutinized Companies Provisions of Florida Statutes.** Section 287.135(2)(a), Florida Statutes, prohibits a company from bidding on, submitting a proposal for, or entering into or renewing a contract for goods or services of any amount if, at the time of contracting or renewal, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, or is engaged in a boycott of Israel. Section 287.135(2)(b), Florida Statutes, further prohibits a company from bidding on, submitting a proposal for, or entering into or renewing a contract for goods or services over one million dollars (\$1,000,000) if, at the time of contracting or renewal, the company is on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum

Energy Sector List, both created pursuant to section 215.473, Florida Statutes, or the company is engaged in business operations in Cuba or Syria.

Accordingly, Contractor hereby certifies that Contractor is not listed on any of the following: (i) the Scrutinized Companies that Boycott Israel List, (ii) Scrutinized Companies with Activities in Sudan List, or (iii) the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List. Contractor further hereby certifies that Contractor is not engaged in a boycott of Israel or engaged in business operations in Cuba or Syria. Contractor understands that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject Contractor to civil penalties, attorney's fees, and/or costs. Contractor further understands that any contract with City for goods or services of any amount may be terminated at the option of City if Contractor (i) is found to have submitted a false certification, (ii) has been placed on the Scrutinized Companies that Boycott Israel List, or (iii) is engaged in a boycott of Israel. And, in addition to the foregoing, if the amount of the contract is one million dollars (\$1,000,000) or more, the contract may be terminated at the option of City if the company is found to have submitted a false certification, has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria.

14. Other Terms. None.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this instrument on the days and year indicated below and the signatories below to bind the parties set forth herein.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

ENGINEERED SPRAY SOLUTIONS, LLC.

Print Name: James S. Collier

Title: Project Manager / Authorized Rep.

STATE OF Florida  
COUNTY OF Polk

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this 4th day of March, 2021, by James Collier of Engineered Spray Solutions, a Florida corporation, on behalf of the corporation, and he/she is personally known to me or has produced (type of identification) as identification.



Melissa Kimball  
Signature of Notary Public - State of Florida

Melissa Kimball  
Printed/Typed/Stamped Name of Notary  
My commission expires: 5/1/22

CITY OF BUNNELL

Catherine D. Robinson  
Catherine D. Robinson, Mayor

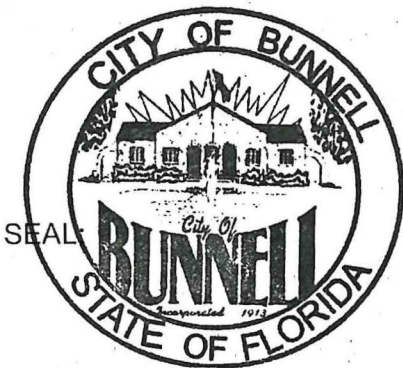
Date: March 22, 2021

Approved as to Legal Form

[Signature]  
Vose Law Firm, City Attorney

ATTEST:

Kristen Bates  
Kristen Bates, City Clerk





CITY OF  
**ST AUGUSTINE**<sup>TM</sup>  
— EST. 1565 —  
NATION'S OLDEST CITY

RECEIVED

OCT 18 2020

BY: \_\_\_\_\_

October 15, 2020

Engineered Spray Solutions, LLC  
Attn: Mr. James Collier  
1306 Banana Road  
Lakeland, FL 33810

RE: Agreement for RFP #PW2020-05 for Sanitary Sewer Manhole Inspections and Rehabilitation

Dear Mr. Collier:

Accompanying this cover letter for your firm's records is the completely executed Agreement between the City of St. Augustine and Engineered Spray Solutions, LLC for Sanitary Sewer Manhole Inspections and Rehabilitation. We look forward to an excellent working relationship.

Please feel free to contact me at my office (904) 209-4305 or, via email, at [swhitener@citystaug.com](mailto:swhitener@citystaug.com) if you have any questions.

Sincerely,

Sharon F. Whitener, CPPO  
Procurement Manager

SFW

Enclosure

xc: John P. Regan, City Manager  
Meredith L. Breidenstein, Assistant City Manager  
Reuben C. Franklin, Jr., Public Works Director  
Todd J. Grant, Utilities Director  
James C. Piggott, General Services Director  
File

**CONSTRUCTION SERVICES AGREEMENT  
BETWEEN THE  
CITY OF ST. AUGUSTINE  
AND ENGINEERED SPRAY SOLUTIONS LLC FOR THE  
SANITARY SEWER MANHOLE INSPECTIONS AND REHABILITATION PROJECT**

THIS AGREEMENT is entered into by and between the CITY OF ST. AUGUSTINE (“the City”), whose address is P. O. Box 210, St. Augustine, Florida 32085-0210, and ENGINEERED SPRAY SOLUTIONS LLC (“Contractor”), whose address is 1306 Banana Road, Lakeland, Florida 33810. All references to the parties hereto include the parties, their officers, employees, agents, successors, and assigns.

In consideration of the payments hereinafter specified, the covenants and conditions of this Agreement, and other good and valuable consideration, the adequacy of which is hereby acknowledged, Contractor agrees to furnish and deliver all materials and perform all services and labor required for (“the Work”). In accordance with RFP Number PW2020-05, Contractor shall complete the Work in conformity with this Agreement, which consists of and incorporates all of the following documents: (1) advertisement for proposals; (2) Instructions to Respondents; (3) addenda; certifications, and affidavits; (4) proposal submittals; and (5) this Agreement, including the Scope of Work, Specifications, General Conditions and any Special Conditions or other attachments. If any provision in the body of this Agreement conflicts with any attachment hereto, the terms of this Agreement shall prevail unless the referenced attachment is a requirement pursuant to grant funding. This Agreement, including attachments, shall take precedence over all solicitation documents (items 1 - 4). The parties hereby agree to the following terms and conditions.

**1. TERM OF AGREEMENT**

- (a) The term of this Agreement shall run from the Effective Date to the Final Completion Date. Time is of the essence for each and every aspect of this Agreement. Where additional time is allowed to complete the Work, the new time limit shall also be of the essence. All provisions of this Agreement that by their nature extend beyond the Completion Date shall survive termination or expiration of this Agreement.
- (b) **Effective Date.** The Effective Date is the date upon which the last party to this Agreement has dated and executed the same.
- (c) **Completion Date.** The Completion Date of this Agreement is September 30, 2021, unless extended by mutual written agreement of the parties. The Completion Date for specific work orders shall be the time for completion stated in the work order; which shall be agreed upon by both parties.
- (d) This Agreement may be renewed by mutual and written consent of each party for no more than a total of four (4) consecutive years.

**2. COMMENCEMENT OF WORK**

- (a) Contractor shall commence the Work within fourteen (14) days of issuance of a Work Order by the City, this date shall be known as the “Commencement Date.” Contractor shall prosecute the Work regularly, diligently, and uninterruptedly so as to complete the Work ready for use in accordance with the Scope of Work and the time for completion stated therein. Contractor shall not commence the Work until any required submittals are received and approved.

### 3. LIQUIDATED DAMAGES

- (a) If Contractor neglects, fails, or refuses to satisfactorily complete the Work by the Completion Date, Contractor shall, as a part of the consideration for this Agreement, pay the City the amount stipulated herein, not as a penalty, but as liquidated damages for such breach, for each calendar day Contractor is in default thereafter. This amount is fixed and agreed upon between the parties due to the impracticability and extreme difficulty of ascertaining the actual damages the City would sustain in such event. The amount of liquidated damages shall be \$500.00 per day. Liquidated damages shall be deducted from payments as they become due and may be deducted from the retainage due upon completion. They constitute an agreed-upon liquidated sum solely for consequential damages attributable to delay and are not a substitute for any other consequential damages incurred by the City, such as the cost of finding a replacement Contractor for completion of the Work if this Agreement is terminated by the City for non-performance.
- (b) Contractor shall not be charged with liquidated damages or any excess cost when the City determines that Contractor's reasons for the time extension are acceptable in accordance with **FORCE MAJEURE; DELAYS; EXTENSION OF COMPLETION DATE, as described below**. A written extension of the Completion Date constitutes a waiver of liquidated damages to the new Completion Date unless expressly provided therein to the contrary.

### 4. DELIVERABLES

- (a) The Work is specified in the Scope of Work, Exhibit A. Contractor shall deliver all products and deliverables as stated therein. Contractor is responsible for the professional quality, technical accuracy, and timely completion of the Work. Both workmanship and materials shall be of good quality. Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials provided. Unless otherwise specifically provided for herein, Contractor shall provide and pay for all materials, labor, and other facilities and equipment necessary for performance of the Work. The City's Project Manager shall make a final acceptance inspection of the deliverables when completed and finished in all respects.
- (b) If not otherwise addressed in the Scope of Work and/or Specifications, upon written request, Contractor shall submit written progress reports to the City's Project Manager at the frequency requested in the form approved by the Project Manager at no additional cost to the City. The progress report shall provide an updated progress schedule, taking into account all delays and approved changes in the Work. Failure to provide a progress report will be cause to withhold payment.

### 5. OWNERSHIP OF DELIVERABLES

All deliverables, including Work not accepted by the City, are City property when Contractor has received compensation therefor, in whole or in part. Any City source documents or other City or non-City documents, specifications, materials, reports, or accompanying data developed, secured, or used in the performance of the Work, excluding proprietary materials, as outlined in the Statement of Work, are City property and shall be safeguarded and provided to the City upon request. City plans and specifications shall not be used on other work and, with the exception of the original plans and specifications, shall be returned to the City upon request. This obligation shall survive termination or expiration of this Agreement.

## 6. FUNDING OF AGREEMENT

- (a) For satisfactory performance of the Work, the City agrees to pay Contractor in accordance with the Unit Price Schedule, Exhibit D and as set forth in each Work Order and billed in accordance with the terms of the Work Order.

## 7. PAYMENT OF INVOICES

- (a) Contractor shall submit monthly itemized invoices by one of the following two methods: (1) by mail to the City of St. Augustine, Financial Management, P. O. Box 210, St. Augustine, FL 32085-0210, or (2) by e-mail to [purchasing@citystaug.com](mailto:purchasing@citystaug.com). Each invoice shall be submitted in detail sufficient for proper pre-audit and post-audit review. If necessary, for audit purposes, Contractor shall provide additional supporting information as required to document invoices.

## 8. CONTRACT PAYMENT AND COMPLIANCE WITH THE LOCAL GOVERNMENT PROMPT PAYMENT ACT

- (a) Each month, the Contractor shall submit an application for payment for work performed to that point. The Owner will process and issue payment in compliance with the requirements of the Florida Local Government Prompt Payment Act as described below. Final payment in the amount of ten percent (10%) of the total project amount will be retained pending final inspection and acceptance of the project by the Owner and proof of complete payment to all subcontractors and suppliers.
- (b) All invoices shall include the following information: (1) City contract number; (2) City encumbrance number; (3) City work-order number, if applicable; (4) Contractor's name and address (include remit address, if necessary); (5) Contractor's invoice number and date of invoice; (6) City Project Manager or Work Order Manager, if applicable; (7) Contractor's Project Manager; (8) supporting documentation as to cost and/or project completion (as per the cost schedule and other requirements of the Statement of Work; for work-orders, see special requirements under **WORK ORDERS**); (9) Progress Report (if required); (10) Diversity Report (if otherwise required herein). Invoices that do not correspond with this paragraph shall be returned without action, stating the basis for rejection. Payments shall be made within twenty (20) business days of receipt of an approved invoice. Disputes regarding invoice sufficiency are resolved pursuant to the dispute resolution procedure of this Agreement.
- (c) As conditions precedent to final payment under this Contract, the Contractor shall furnish any manufacturers' guarantees or warranties for materials provided or equipment installed in the Work; shall have performed all other requirements pursuant to the Contract Documents; shall warrant all workmanship for a period of one (1) year after the date of final acceptance of the Work by the Owner and shall furnish signed copies of the Contractor's Warranty Guarantees signed by Contractor, subcontractors, materialsmen, suppliers, laborers or others furnishing work, labor, materials, machinery or fixtures in the performance of the Work. The City shall be the expressly designated beneficiary of any and all Warranty Guarantees. Acceptance of any Work or any possession taken by Owner shall not operate as a waiver of any provision of the Contract Documents or any right or power reserved to Owner, including any right to damages provided in the Contract Documents.



- (d) In order to comply with the provisions of the Florida Local Government Prompt Payment Act, the City designates the following as its Agent:
1. James Wheeler, P.E.  
Public Works Department  
City of St. Augustine  
P.O. Box 210  
St. Augustine, FL 32085-0210  
904-209-4276 (Office)  
904-209-4286 (Fax)  
Email: [jwheeler@citystaug.com](mailto:jwheeler@citystaug.com)
  2. The City's Agent is required to review invoices or payment requests prior to processing for payment.
  3. The due date for payment of construction services by the City shall be determined as follows:
    - a) If the City's agent must approve the payment request or invoice submitted by the Contractor before the payment request or invoice is submitted to the City, payment shall be due twenty-five (25) business days after the date on which the payment request or invoice is stamped as received as provided in Section 218.74(1), F.S. The Contractor may send the City an overdue notice. If the payment request or invoice is not rejected within four (4) business days after delivery of the overdue notice, the payment request or invoice shall be deemed accepted, except for any portion of the payment request or invoice that is fraudulent or misleading.
    - b) If the City's agent need not approve the payment request or invoice submitted by the Contractor, payment is due twenty (20) business days after the date on which the payment request or invoice is stamped as received as provided in Section 218.74(1), F.S.
    - c) If a payment request or invoice submitted by the Contractor does not meet the contract requirements, the City must reject the payment request or invoice within twenty (20) business days after the date on which the payment request or invoice is stamped as received as provided in Section 218.74(1), F.S. The rejection must be written and must specify the deficiency and the action necessary to make the payment request or invoice proper.
    - d) If a payment request or invoice is rejected and the Contractor submits a payment request or invoice which corrects the deficiency, the corrected payment request or invoice must be paid or rejected ten (10) business days after the date the corrected payment request or invoice is stamped as received as provided in Section 218.74(1), F.S.
    - e) If a dispute between the City and the Contractor cannot be resolved by the procedure described above, the dispute shall be resolved in accordance with the dispute resolution procedure described in Section 217.76(2), F.S.

- f) If the City disputes only a portion of a payment request or invoice submitted by the Contractor, the City shall pay the undisputed portion in a timely manner in accordance with subsections (a) and (b) above.

4. Punch List

- a) For projects less than \$10,000,000.00.  
Within thirty (30) calendar days of reaching Substantial Completion of the Work as defined in the Contract or, if not defined in the Contract, upon reaching beneficial occupancy or use, the City's Project Manager, the Project Engineer and the Contractor shall review the work, note any deficiencies and develop a single list of items required to render the construction services purchased by the City complete, satisfactory and acceptable. The list shall be delivered to the

Contractor no later than five (5) calendar days after it has been developed and reviewed.

- b) For projects more than \$10,000,000.00.  
Within thirty (30) calendar days or, if extended by Contract, up to sixty (60) calendar days, of reaching Substantial Completion of the Work or, if not defined in the contract, upon reaching beneficial occupancy or use, the City's Project Manager, the Project Engineer and the Contractor shall review the Work, note any deficiencies and generate a list of items required to render the construction services purchased by the City complete, satisfactory and acceptable. The list shall be delivered to the Contractor no later than five (5) days after it has been developed and reviewed.

- c) The Final Contract Completion Date shall be no fewer than thirty (30) days after delivery of the list of items. If the list is not provided to the Contractor by the agreed upon date for delivery of the list, the Contract Term for completion shall be extended by the number of days the City exceeded the delivery date.

- (e) **Payments withheld.** The City may withhold or, on account of subsequently discovered evidence, nullify, in whole or in part, any payment to such an extent as may be necessary to protect the City from loss as a result of: (1) defective Work not remedied; (2) failure of Contractor to make payments when due to subcontractors or suppliers for materials or labor; (3) failure to maintain adequate progress in the Work; (4) damage to another contractor; or (5) any other material breach of this Agreement. Amounts withheld shall not be considered due and shall not be paid until the ground(s) for withholding payment have been remedied.

- (f) **Payments.** The City shall pay Contractor one hundred percent (100%) of each approved invoice.

9. **COST OF LIVING INCREASES.** A Consumer Price Index ("CPI") – based Cost Schedule increase may be requested in writing no later than three months before the contract renewal date. The increase will be limited to the lesser of five percent or the result of the CPI percentage increase calculation expressed below. The CPI percentage increase shall be calculated by using the Consumer Price Index for All Urban Consumers ("CPI-U") numbers provided by the Bureau of Labor Statistics. The CPI percentage increase shall be calculated by subtracting from the most recent May CPI-U number the CPI-U number for the previous May, then dividing the remainder

by the previous May's number, and finally, multiplying the quotient by 100. Cost Schedule increases shall be prorated based upon the number of calendar months in the City's fiscal year that the contract has been in effect. (For example, a cost schedule increase for renewal of a contract initiated in March (six months into the City's fiscal year), would be limited to the lesser of either one-half of the CPI percentage increase or 2.5 percent upon renewal in October.) In the event this contract includes a provision for fuel adjustment, and an upward fuel adjustment is made during the contract year, the CPI percentage increase shall be multiplied by the percentage of the Total Compensation allocated to non-fuel costs. For example, if it is determined that the cost of fuel is 20 percent of the Total Compensation, the CPI percentage increase shall be multiplied by 0.8.

10. **PAYMENT AND RELEASE** Contractor's acceptance of final payment shall constitute a release in full of all Contractor claims against the City arising from the performance of this Agreement, with the exception of any pending claims for additional compensation that have been documented and filed as required by this Agreement.
11. **INDEMNIFICATION** Contractor shall indemnify and hold harmless, release, and forever discharge the City, its public officers, employees, agents, representatives, successors, and assigns, from any and all liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor, its employees or sub-contractors, in the performance of the Work and resulting from damages to property, personal injury, or loss of life.
12. **INSURANCE AND PERMITS.** Contractor shall acquire and maintain, at its own expense, all permits, and licenses required by law and shall maintain the same in full force and effect. Contractor is responsible for conformance with all State and Federal regulations and requirements. City of St. Augustine permit fees shall be waived.

Contractor shall provide all insurance required by Exhibit B, Insurance Requirements, and shall not commence Work until it has provided Certificates of Insurance to the City as per Exhibit B. Receipt of Certificates of Insurance indicating less coverage than required does not constitute a waiver of the Insurance Requirements. Contractor waives its right of recovery against the City to the extent permitted by its insurance policies. Contractor's insurance shall be considered primary, and City insurance shall be considered excess, as may be applicable to Contractor's obligation to provide insurance.

13. **FUNDING CONTINGENCY.** This Agreement is at all times contingent upon funding availability, which may include a single source or multiple sources, including, but not limited to: (1) ad valorem tax revenues appropriated by the City's Commission; (2) annual appropriations by the Florida Legislature, or (3) appropriations from other agencies or funding sources. Agreements that extend for a period of more than one Fiscal Year are subject to annual appropriation of funds in the sole discretion and judgment of the City's Commission for each succeeding Fiscal Year. Should the Work not be funded, in whole or in part, in the current Fiscal Year or succeeding Fiscal Years, the City shall so notify Contractor and this Agreement shall be deemed terminated for convenience five (5) days after receipt of such notice, or within such additional time as the City may allow. For the purpose of this Agreement, "Fiscal Year" is defined as the period beginning on October 1 and ending on September 30.

#### 14. **PROJECT MANAGEMENT AND PERSONNEL**

- (a) The Project Managers listed below shall be responsible for overall coordination and management of the Work. Either party may change its Project Manager upon three (3) business

days prior written notice to the other party. Written notice of change of address shall be provided within five (5) business days. All notices shall be in writing to the Project Managers at the addresses below and shall be sent by one of the following methods: (1) hand delivery; (2) U.S. certified mail; (3) national overnight courier; (4) e-mail or, (5) fax. Notices via certified mail are deemed delivered upon receipt. Notices via overnight courier are deemed delivered one (1) business day after having been deposited with the courier. Notices via e-mail or fax are deemed delivered on the date transmitted and received.

CITY

James Wheeler, P.E., Project Manager  
 City of St. Augustine  
 P.O. Box 210  
 St. Augustine, Florida 32085-0210  
 904-209-4276 (office)  
 904-209-4286 (fax)  
 E-mail: [jwheeler@citystaug.com](mailto:jwheeler@citystaug.com)

CONTRACTOR

James J. Collier, Project Manager  
 Engineered Spray Solutions LLC  
 1306 Banana Road  
 Lakeland, Florida 33810  
 863-577-4821 (office)  
 863-853-8593 (fax)  
 E-mail: [jcollier@ess-1.net](mailto:jcollier@ess-1.net)

- (b) The City's Project Manager shall have sole and complete responsibility for transmitting instructions, receiving information, and communicating City policies and decisions regarding all matters pertinent to performance of the Work, and may approve minor deviations in the Work that do not affect the Total Compensation or Completion Date or otherwise significantly modify the terms of the Agreement. For Work Order-based contracts, the City may designate a "Work Order Manager" on the Work Order, who will serve as the Project Manager for that Work Order and shall have the same responsibilities as the City's Project Manager. The City's Project Manager may approve minor deviations in the Work that do not affect the Total Compensation or Completion Date or otherwise significantly modify the terms of the Agreement. The City's Project Manager and, as appropriate, other City employees, shall meet with Contractor when necessary in the City's judgment to provide decisions regarding performance of the Work, as well as to review and comment on reports.
- (c) Contractor shall provide efficient supervision of the Work, using its best skill and attention. Contractor shall keep on the worksite during its progress a competent superintendent, satisfactory to the City. The superintendent shall not be changed except with the City's consent, unless the superintendent proves to be unsatisfactory to Contractor and/or ceases to be in its employ. The superintendent shall represent Contractor in the absence of Contractor's Project Manager. All directions given to him shall be as binding as if given to Contractor. If the City produces documented evidence and informs the Contractor that any person on the job is incompetent, disorderly, or is working contrary to the Agreement or the City's instructions, that person shall thereupon be immediately dismissed from the project and shall not be given employment on any work connected with this Agreement. The City may request Contractor replace its Project Manager if said manager fails to carry the Work forward in a competent manner, follow instructions or specifications, or for other reasonable cause.
- (d) Contractor shall maintain an adequate and competent professional staff. Contractor's employees, subcontractors, or agents shall be properly trained to meet or exceed any specified licensing, training and/or certification applicable to their profession. Upon request, Contractor shall furnish proof thereof.

## 15. SCHEDULING AND WORK PLANNING; PROGRESS REPORTING

- (a) **Pre-work Conference.** Within ten (10) days after execution of this Agreement, Contractor shall schedule a pre-work conference with the City's Project Manager to discuss scheduling and other matters. Contractor shall provide a work plan for the City's approval not fewer than five (5) days prior to the pre-work conference. The City shall have ten (10) days to review the work plan. Not less than five (5) days prior to the pre-work conference, Contractor shall provide the City a list of each subcontract exceeding ten percent (10%) of the Total Compensation. The list shall include: (1) name, address, contract, phone number and email address of subcontractor, (2) description of subcontract work, and (3) estimated value of work.
- (b) **Progress Reports.** Contractor shall provide to the City the project schedule and update/status reports as provided in the Scope of Work. Reports will provide detail on progress of the Work and outline any potential issues affecting completion or the overall schedule. Reports may be submitted in any form agreed to by City's Project Manager and Contractor, and may include emails, memos, and letters.
- (c) **Daily Reporting.** The City may require Contractor to provide a daily report regarding the progress of the Work. The need for a daily report shall be determined at the pre-work conference. If required, a form shall be completed for each day any Work is performed until the project is accepted by the City. Completed forms shall be submitted to the City's Project Manager or other authorized representative by 9:00 a.m. of the following day.
- (d) **Progress Meetings.** The City may elect to conduct on-site progress meetings with Contractor on a frequency to be determined by the City. In such event, Contractor shall make available its Project Manager and/or superintendent and other appropriate personnel to discuss matters pertinent to the Work.
- (e) **Failure to Meet Schedule.** If progress of the Work falls five percent (5%) or more behind schedule, except as a result of City-approved delays, Contractor shall take all necessary steps to augment the work effort to get the project back on schedule. Should the progress of the Work fall ten percent (10%) or more behind schedule, the City may advise Contractor through a "cure" notice that this Agreement is subject to termination for cause if the failure is not cured within the time frame specified in said notice.

## 16. FORCE MAJEURE; DELAYS

- (a) **Force Majeure.** Contractor shall not be liable for failure to carry out the terms of this Agreement to the extent such failure is due to a Force Majeure event, except for failures that could have been reasonably foreseen and guarded against so as to avoid or reduce the adverse impact thereof. A Force Majeure event is hereby defined as the failure to carry out any of the terms of this Agreement due to any one of the following circumstances beyond the control of Contractor: (a) the operation and effect of rules, regulations, or orders promulgated by any commission, county, municipality, or governmental agency of the State of Florida or the United States, (b) a restraining order, injunction, or similar decree of any court of competent jurisdiction, (c) war, (d) flood, (e) earthquake, (f) fire, (g) severe wind storm, (h) acts of public disturbance, (i) quarantine restrictions, (j) epidemics, (k) strikes, (l) freight embargoes, or (m) sabotage. The times specified herein for performances include delays that can ordinarily be anticipated due to adverse weather conditions. The

City is not obligated to grant an extension of time due to adverse weather conditions unless such conditions rise to the level of Force Majeure.

- (b) **Delay.** Contractor shall not be compensated for delays caused by Contractor's inefficiency, rework made necessary by Contractor's error, failure to perform the Work as scheduled, or any other corrective or productivity measures made necessary by errors, omissions, or failures to properly perform the Work. Neither shall the Contractor be compensated for delays caused by events by force majeure as described in sub-para (a) above. Within ten (10) days after the onset of a delay, Contractor shall notify the City in writing of the delay, which shall provide: (1) a detailed description the delay and its probable duration, (2) the specified portion of the Work affected, and (3) an opinion as to the cause of the delay and liability (if any) for the delay. Notices provided more than ten (10) days after the inception of the delay shall only be effective as to additional time incurred during the ten (10) day period preceding receipt of such notice. In the case of continuing cause delay for the same cause, only one notice of delay is necessary. **Failure to provide this notice waives any claim for extension of time resulting from such delay.** If the delay is due to the failure of another City contractor to complete its work in a timely manner, changes ordered in the Work, a Force Majeure event, or any other cause which the City, in its sole judgment and discretion, determines to justify the delay, then the Completion Date may be extended as necessary to compensate for the delay. All time extensions shall be in the form of a written amendment signed by both parties.

#### 17. MODIFICATION OF SPECIFICATIONS; CHANGE ORDERS; EMERGENCY CHANGES IN WORK

- (a) **Modification of Specifications.** No oral agreement or conversation with any officer, agent, or employee of the City after execution of this Agreement shall affect or modify any of its terms. No one is authorized to change any provision of the specifications without written authorization of the City. The presence or absence of a City inspector shall not relieve Contractor from any requirements of this Agreement.
- (b) **Change Orders**
- (i) The City may alter, add to, or deduct from the Work by executing a Change Order without liability to Contractor, except for the reasonable cost of any additional Work. All such Work within Contractor's capacity to perform shall be performed pursuant to the Change Order. Any associated claim for extension of time will be adjusted when the Change Order is issued. The parties shall negotiate the cost of the Change Order on an equitable basis, which may be determined in one or more of the following ways: (1) estimate and acceptance of a lump sum, (2) unit prices named in the contract or subsequently agreed upon, (3) costs and percentage or by (4) cost and a fixed fee. If the parties cannot agree upon cost, Contractor shall implement the Change Order and shall maintain and present in such form as the City Project Manager may direct the correct amount of the net cost of labor and materials, together with vouchers. The Project Manager will certify the amount due Contractor, including reasonable allowances for overhead and profit. Pending a final determination of value, payments will be based upon the City Project Manager's certification. Final resolution of the amount due to Contractor shall be pursuant to the dispute resolution procedure.

- (ii) For any Change Order requests submitted by Contractor, the City may determine that City instructions to correct deficient Work, to stop the Work due to deficiencies in the Work, or any other matters that impose additional costs upon Contractor, do not warrant an increase in the Total Compensation or extension of the Completion Date. If Contractor disputes this determination, final resolution shall be pursuant to the dispute resolution procedure.
- (c) **Emergency Changes in Work.** In the event an emergency endangering life or property requires immediate action, the City may give Contractor an oral instruction to proceed with an emergency change in the Work, which will be confirmed in writing within five (5) days. Within fifteen (15) days after commencement of the emergency change in the Work, Contractor shall provide the City with a written estimate of any increased costs or delays as a result thereof. **Failure to so notify the City constitutes a waiver of any right to an extension of time or increase in compensation.** Within fifteen (15) days after receipt of Contractor's estimate, the parties shall negotiate a Change Order. If unable to reach agreement, disputed issues shall be resolved pursuant to the dispute resolution procedure. In no event shall Contractor decline to perform the emergency change in the Work.

## 18. TERMINATION AND SUSPENSION

- (a) **City Termination for Cause.** The Agreement may be terminated by the City for cause in the event of any breach hereof, including, but not limited to, Contractor's: (1) failing to carry forward and complete the Work as provided herein; (2) failing to comply with applicable laws, regulations, permits, or ordinances; (3) failing to timely correct defective Work; (4) making a general assignment for the benefit of its creditors; (5) having a receiver appointed because of insolvency; (6) filing bankruptcy or having a petition for involuntary bankruptcy filed against it; (7) failing to make payments when due to subcontractors, vendors, or others for materials or labor used in the Work; (8) making a material misrepresentation to the City regarding the Work, or (9) any other material breach of this Agreement. In such event, the City shall provide Contractor with written notice of its intention to terminate this Agreement, stating the nature of the deficiency and the effective date of termination. At the City's sole judgment and discretion, the City may afford Contractor an opportunity to cure said deficiency, in which event the notice shall specify the time allowed. Upon termination, the City may take possession of the premises and of all materials thereon and finish the Work by whatever means it deems expedient. In such event, Contractor shall not receive any further payment until the Work is completed by the City. Contractor shall be liable for all costs involved in completing the Work, including additional managerial and administrative services, which shall be offset against any amount due to Contractor.
- (b) **City Termination for Convenience.** Notwithstanding any other provision hereof, the City may at any time terminate this Agreement or any Work issued under it, in whole or in part, without cause, upon thirty (30) days written notice to Contractor. In such event, Contractor shall be compensated for any Work performed prior to the date of termination and for materials that were ordered prior to receipt of notice of termination that cannot be returned to the vendor, which shall become City property. Upon receipt of notice, Contractor shall discontinue the Work on the date and to the extent specified therein and shall place no further orders for materials, equipment, services, or facilities, except as needed to continue any portion of the Work not terminated. Contractor shall also make every reasonable effort to cancel, upon terms satisfactory to the City, all orders or subcontracts related to the terminated Work. Contractor may not claim any compensation not specifically provided

for herein, including, but not limited to: loss of anticipated profits; idle equipment, labor, and facilities; any additional claims of subcontractors and vendors.

- (c) **City Suspension for Cause.** The City may issue a written partial or full Stop Work Notice in the event Contractor fails to comply with or is negligent in performing any provision hereof. All performance shall immediately cease as per such notice and no further billable costs shall be incurred. The City may terminate this Agreement if Contractor fails or refuses to comply with a Stop Work Notice.
- (d) **City Suspension for Convenience.** The City may direct Contractor to stop Work, in whole or in part, whenever, in the City's sole judgment and discretion, such stoppage is necessary to ensure proper completion of the Work, avoid injury to third persons, or otherwise meet the City's objectives. The City shall provide Contractor not fewer than five (5) days written notice, except in emergency circumstances. Contractor shall immediately comply with such notice. Should such stoppage increase Contractor's cost, an equitable adjustment will be made by Change Order. The notice shall be effective until rescinded in writing, unless the period of suspension is stated in the notice.
- (e) **Contractor's Right to Stop Work or Terminate Agreement**
  - (i) **Stop Work.** Contractor may stop work only under the following circumstances: (1) the Work is ordered temporarily discontinued by a court or other public authority; (2) it is necessary to stop work in order to protect the safety of Contractor or third persons; or (3) the City fails to pay Contractor when due any undisputed and adequately documented sum certified for payment by the City Project Manager. In such event, Contractor shall provide the City not fewer than seven (7) days prior written notice of its intention to stop work, except in emergency circumstances or when necessary to prevent injury to persons or property.
  - (ii) **Termination.** Contractor may terminate this Agreement under only the following circumstances: (1) the Work is ordered discontinued by a court or other public authority, through no act or fault of Contractor, for a period of not fewer than three months; (2) the City fails to pay Contractor when due any undisputed and adequately documented sum certified for payment by the City Project Manager. In such event, Contractor shall provide not fewer than twenty (20) days written notice of its intention to terminate and afford the City the opportunity to cure said deficiency within said time period.
  - (iii) **Duty to Perform.** Except as expressly provided above, in the event of any event, dispute, or other matter arising under this Agreement, Contractor shall fully perform the Work in accordance with the City's written instructions and may claim additional compensation as a Change Order, subject to the dispute resolution procedure.

19. **PROTECTION OF WORK.** Contractor shall protect and prevent damage to all finished and unfinished portions of the Work including, but not limited to, the protection of the same from damage by the elements, theft or vandalism. Restoration of such damage shall be the sole responsibility



of Contractor and shall not be cause for an increase in the Contract Consideration nor any extension of the Term.

- 20. **TRENCH SAFETY.** In the performance of this contract, Contractor may be requested to supply cost estimates for trench excavation to a depth exceeding five feet. Section 553.62, F.S., incorporates the Occupational Safety and Health Administration’s excavation safety standards, 29 CFR s. 1926.650 Subpart P, as the standard. Contractor shall separately estimate the cost of compliance with those standards as required by Section 553.63, F.S. Such estimate shall be based on the linear feet of trench to be excavated and shall include written assurance of compliance with those standards and any applicable special shoring requirements.
- 21. **NO ASSIGNMENT.** The Contractor may not assign this Contract without the advance written approval of the City. For the purposes of this paragraph, assignment shall be interpreted to include any transfer of more than fifty (50%) percent of the ownership interests of the Contractor whether or not the Contractor is a sole proprietorship, partnership, corporation, limited liability company, limited partnership or any other business, organization or entity.
- 22. **COMPLIANCE WITH PUBLIC RECORDS ACT**

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR’S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:**

Telephone:	(904) 825-1007
Email:	<a href="mailto:recordsrequest@citystaug.com">recordsrequest@citystaug.com</a>
Mailing Address:	City of St. Augustine Darlene Galambos, City Clerk Public Records Custodian P.O. Box 210 St. Augustine, Florida 32085-0210

Pursuant to Chapter 119, Florida Statutes, the Contractor shall comply with the provisions of the Florida Public Records Act, specifically to:

- 1. Keep and maintain public records required by the City to perform the Work.
- 2. Upon request from the City’s custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- 3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- 4. Upon completion of the contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall

meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

5. A request to inspect or copy public records relating to the City's contract for services must be made directly to the City. If the City does not possess the requested records, the City shall immediately notify the Contractor of the request, and the Contractor must provide the records to the City or allow the records to be inspected or copied within a reasonable time.
  6. If the Contractor does not comply with the City's public records request for records, the City shall consider such noncompliance a material default of the terms of the contract and shall seek such remedies for such default as provided in the contract or at law.
  7. A contractor who fails to provide the public records to the City within a reasonable time may be subject to penalties under F.S. 119.10.
23. **NO WAIVER OF SOVEREIGN IMMUNITY.** Nothing in this agreement shall be construed as a waiver of sovereign immunity beyond that provided in Section 768.28, F.S., nor shall anything in this Agreement be construed as increasing the limits of the sovereign immunity of the City as provided in Section 768.28; F.S.

#### 24. ACCESS; WORK AREA; GATES

- (a) **Access.** The City will provide sufficient access to accomplish Work performed on City property. Contractor shall maintain all on-site roadways and paved and unpaved access roadways to and from the worksite in an acceptable and passable condition at no additional cost to the City, and shall, upon conclusion of the Work, return said roadways to City in their original condition. Land access to construction sites is restricted to the route designated by the City. Contractor is responsible for improvements and repairs to access routes required during construction. All access routes shall be used for the purpose of construction only. Contractor shall not disturb lands or waters outside the area of construction, except as may be found necessary and authorized by the City.
- (b) **Work Area.** All Work shall be confined to the designated work area(s). Contractor shall obtain written approval from the City before making any adjustments.

#### 25. ASSIGNMENT AND SUBCONTRACTS

- (a) Contractor shall not sublet, assign, or transfer any Work involving more than fifteen percent (15%) of the total cost of the Work, or assign any monies due hereunder, without the City's prior written consent. As soon as practicable after signing this Agreement, but not fewer than seven (7) business days prior to the effective date of any subcontracts, Contractor shall notify the City's Project Manager in writing of the name of any subcontractor that has not been previously disclosed in the procurement process. Within five (5) business days, after the City receipt of said notification, the City shall indicate its approval or disapproval, which shall not be unreasonably withheld. Failure to timely provide such approval or disapproval shall constitute approval. Neither City approval of a subcontractor nor any other provision of this Agreement creates a contractual relationship between any subcontractor and the City. Contractor shall be allowed a maximum 10% markup of their subcontractor's work for oversight and management.
- (b) Contractor is responsible for fulfilling all work elements in any subcontracts and payment of all monies due. Contractor is fully responsible to the City for the acts and omissions of

its subcontractors and persons directly or indirectly employed by them and shall hold the City harmless from any liability or damages resulting from any subcontract to the extent allowed by law.

26. **AUDIT; ACCESS TO RECORDS.** Until the expiration of three (3) years after expenditure of funds hereunder, the City or its duly authorized representatives shall have access to examine any of Contractor's books and other records involving transactions related to this Agreement. Contractor shall preserve all such records for a period of not fewer than three (3) years. Contractor shall refund any payment(s) that are found to not constitute allowable costs based upon audit examination. All required records shall be maintained until an audit has been completed and all questions arising from it are resolved. Contractor will provide proper facilities for access to and inspection of all required records.

## 27. BONDS

Pursuant to Chapter 255.05 F.S., prior to commencing the work, the Selected Contractor shall execute and record in the public records of St. Johns County a payment and performance bond with a surety insurer authorized to do business in the State of Florida. A certified copy of the recorded bond shall be provided to the City prior to commencement of the work.

- (a) Payment Bond. A payment bond equal to the Total Compensation is required for fixed price contracts and fixed price Work Orders greater than \$100,000; provided, however, that the bond may be reduced by the City, in its sole judgment and discretion, to that amount necessary to ensure payment of all subcontractors and materialmen. The City may require, in its sole judgment and discretion, a payment bond for fixed price contracts and Work Orders of \$100,000 or less in which event the bonding requirement shall be disclosed in the Invitation for Bids or Work Order specifications.
- (b) Performance Bond. A performance bond equal to one hundred twenty-five percent (125%) of the Total Compensation is required for fixed price contracts and Work Orders greater than \$200,000. The City may require, in its sole judgment and discretion, a performance bond for fixed price contracts and Work Orders of \$200,000 or less in which event the bonding requirement shall be disclosed in the Invitation for Bids or Work Order specifications.
- (c) Completed bonds shall be delivered to and accepted by the City prior to commencement of the Work. Bond premiums shall be paid by Contractor. Bonds shall be (1) either in the reproduced form provided in the Bid Documents or in a form approved by the City, and (2) written through a licensed agency that fulfills the requirements of Section 287.0935, F.S.
- (d) **Qualification-Management and Strength.** The Surety executing a bond must be rated no less than "Excellent" for both financial strength and issuer credit, with a rating outlook of stable or positive for both, and must have a financial size rating of VII or better according to the latest information available from A.M. Best Company, Inc.'s rating and analysis web site.
- (e) In lieu of the bond, a Contractor may submit an alternative form of security in the form of cash, money order, certified check, cashier's check, irrevocable letter of credit, or other security acceptable to the City.

28. **CIVIL RIGHTS.** Pursuant to Chapter 760, F.S., Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, age, handicap, or marital status.
29. **CLEANUP; EQUIPMENT REMOVAL.** Upon expiration or termination of this Agreement, Contractor shall restore the worksite to its original condition, except for replacement of vegetation, unless otherwise required by this Agreement. Contractor shall remove from City property and all public and private property all machinery, equipment, supplies, surplus materials, temporary structures, rubbish, and waste materials resulting from its activities. After twenty (20) days, the City may sell or dispose of any materials left at the worksite as it sees fit and deduct the cost of sale or disposal from any amounts due to Contractor. Any revenues obtained shall be applied toward costs incurred by the City, with excess revenues paid to Contractor.

30. **COORDINATION WITH THE CITY AND OTHER CITY CONTRACTORS**

- (a) The City may let other contracts in connection with the Work. Wherever work done by the City or another City contractor is contiguous to Contractor's Work, the respective rights of the various interests shall be established by the City so as to secure completion of the Work. Contractor shall arrange its Work so as not to interfere with the City or other City contractors and join its Work to that of others in a proper manner, and in accordance with the intent of the Scope of Work. Contractor shall perform its Work in the proper sequence in relation to that of other City contractors, as may be directed by the City. Contractor shall afford other City contractors' reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly conduct and coordinate its Work with theirs. Contractor shall take into account all contingent work to be done by others and shall not plead its want of knowledge of such contingent work as a basis for delay or non-performance. Contractor shall be liable for any damage it causes to the work performed by other City contractors.
- (b) If any part of the Work depends for proper execution or results upon the work of other City contractors, Contractor shall inspect and promptly report any defects in the other contractor's work that render it unsuitable for Contractor's Work. **Failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of its Work, except as to defects which may develop in the other contractor's work after execution of the Work.**

31. **CORRELATION AND INTENT OF DOCUMENTS; QUESTIONS OR ISSUES REGARDING PERFORMANCE OF THE WORK**

- (a) This Agreement and all attachments are complementary. What is called for by one is as binding as if called for by all. The intent is to include all labor and materials, equipment, transportation, and incidentals necessary for the proper and complete execution of the Work. Materials or work described in words, which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.
- (b) It is the City's intention to fully assist Contractor in the successful performance of the Work and to respond in a timely manner to questions or issues that arise. Contractor should discuss any questions or issues with the City's Project Manager and communicate such questions or issues in writing when required by this Agreement. The City shall respond through its Project Manager.

32. **DAVIS BACON ACT.** This contract is federally funded and is subject to the provisions of the Davis-Bacon Act (40 U.S.C. 276a to a-7), as supplemented by the Department of Labor Regulations (29 CFR part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction"). Under this Act, contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing minimum wage rates and fringe benefits for corresponding classes of laborers and mechanics employed on similar projects in the area. In addition, construction-related subcontracts of more than \$2,000 must include a provision for compliance with the Davis-Bacon Act.
33. **DISPUTE RESOLUTION.**
- (a) **During the course of work.** In the event any dispute arises during the course of the Work, Contractor shall fully perform the Work in accordance with the City's written instructions and may claim additional compensation. Contractor is under a duty to seek clarification and resolution of any issue, discrepancy, or dispute by submitting a formal request for additional compensation, schedule adjustment, or other dispute resolution to the City's Project Manager no later than fifteen (15) calendar days after the precipitating event. If not resolved by the Project Manager within five (5) business days, the Project Manager shall forward the request to the Office of the City Manager, which shall issue a written decision within fifteen (15) calendar days of receipt. This determination shall constitute final action of the City and shall then be subject to judicial review upon completion of the Work. **Contractor shall proceed with the Work in accordance with said determination. This shall not waive Contractor's position regarding the matter in dispute.**
- (b) **Invoices.** In the event the City rejects an invoice as improper, and the Contractor declines to modify the invoice, the Contractor must notify the City in writing within ten (10) calendar days of receipt of notice of rejection that the Contractor will not modify the invoice and state the reason(s) therefor. Within five (5) business days of receipt of such notice, if not informally resolved through discussion with the City Project Manager, the Project Manager shall forward the disputed invoice and the Contractor's written response to the Office of the City Manager. The matter shall then proceed as described in subsection (a), above.
34. **DIVERSITY REPORTING.** The City is committed to the opportunity for diversity in its procurement activities and encourages its prime vendors (contractors and suppliers) to make a good faith effort to ensure that women and minority-owned business enterprises (W/MBE) are given the opportunity for maximum participation as sub-contractors. The City will assist Contractor by sharing information on W/MBEs. Contractor shall provide with each invoice a report describing the company names for all W/MBEs, the type of minority, and the amount spent with each at all levels. The report will also denote if there were no W/MBE expenditures.
35. **DUTY TO INSPECT AND REPORT DEFICIENCIES IN PLANS AND SPECIFICATIONS**
- (a) For any Work that is dependent upon conditions at the worksite, Contractor's acceptance of contract award represents and warrants that Contractor has inspected and satisfied itself concerning the nature and location of the Work and general and local conditions, including, without limitation: (1) conditions affecting transportation, disposal, handling, and storage of materials; (2) availability and quality of labor; (3) availability and condition of roads; (4) climatic conditions and seasons; (5) hydrology of the terrain; (6) topography and ground surface conditions; (7) nature and quantity of surface materials to be encountered; (8) equipment and facilities needed preliminary to and during the Work; and (9) all other

matters that can affect the Work and the cost thereof. Contractor's failure to acquaint itself with such conditions will not relieve it from its responsibility for properly estimating the time required or cost of performing the Work. Where the City has investigated subsurface conditions, this data may be provided to Contractor or is available upon request. Contractor must either seek clarification concerning the data or assume the responsibility for its interpretation.

- (b) If Contractor discovers hidden or subsurface conditions that differ materially from those normally expected or indicated in the technical specifications, Contractor shall immediately, and before such conditions are disturbed, notify the City in writing of: (1) subsurface or latent physical conditions differing materially from those indicated in the technical specifications, or (2) unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for herein. The City shall promptly investigate the conditions and determine whether they materially differ so as to cause an increase or decrease in Contractor's cost. Where the differing site conditions materially impact Contractor's cost, an equitable adjustment shall be made and the Agreement modified accordingly. No claim will be allowed if Contractor fails to provide the required notice.
- (c) If Contractor in the course of the Work finds any defect in the plans and specifications, including, but not limited to, any discrepancy between the drawings and the physical conditions at the worksite, or any errors or omissions in the drawings or in the layout, as given by points and instructions, it shall immediately inform the City in writing, which shall be promptly verified by the City. Any Work done after such discovery, until authorized, will be done at Contractor's risk as to cost overruns and modifications necessary to correct deficiencies in the Work. To ensure the proper execution of its subsequent Work, Contractor shall measure Work already in place or completed and shall immediately report any discrepancy between the executed Work and the drawings or other specifications.
36. **EMPLOYMENT ELIGIBILITY.** Contractor must use the United States Department of Homeland Security's E-Verify system ("E-Verify") to verify the employment eligibility of all persons hired by Contractor during the term of this Agreement to work in Florida. Additionally, if Contractor uses subcontractors to perform any portion of the Work (under this Agreement) valued in excess of \$3,000, Contractor must include a requirement in the subcontractor's contract that the subcontractor use E-Verify to verify the employment eligibility of all persons hired by subcontractor to perform any such portion of the Work. Within 30 days of this Agreement's Effective Date, Contractor must provide the City with evidence that Contractor is enrolled in the E-Verify system. Answers to questions regarding E-Verify as well as instructions on enrollment may be found at the E-Verify website: [www.uscis.gov/e-verify](http://www.uscis.gov/e-verify).
37. **GOVERNING LAW, VENUE, ATTORNEY'S FEES, WAIVER OF RIGHT TO JURY TRIAL.** This Agreement shall be construed according to the laws of Florida and shall not be construed more strictly against one party than against the other because it may have been drafted by one of the parties. As used herein, "shall" is always mandatory. In the event of any legal proceedings arising from or related to this Agreement: (1) venue for any state legal proceedings shall be in a court of competent jurisdiction located in St. Johns County; (2) venue for any federal legal proceeding shall be in the federal court for the Middle District of Florida, Jacksonville Division; (3) each party shall bear its own attorney's fees, including appeals; (4) for civil proceedings, the parties hereby consent to trial by the court and waive the right to jury trial.

38. **INTEREST IN THE BUSINESS OF CONTRACTOR; NON-LOBBYING.** Contractor certifies that no officer, agent, or employee of the City has any material interest, as defined in Chapter 112, F.S., either directly or indirectly, in the business of Contractor to be conducted under this Agreement, and that no such person shall have any such interest at any time during the term of this Agreement. Pursuant to Section 216.347, F.S., monies received from the City pursuant to this Agreement shall not be used to lobby the Florida Legislature or any other state agency.
39. **INDEPENDENT CONTRACTOR.** Contractor is an independent contractor. Neither Contractor nor Contractor's employees are employees or agents of the City. Contractor controls and directs the means and methods by which the Work is accomplished. Contractor is solely responsible for compliance with all labor, wage and hour and tax laws pertaining to it, its officers, agents, and employees, and shall indemnify and hold the City harmless from any failure to comply with such laws. Contractor's duties include, but not be limited to: (1) providing Workers' Compensation coverage for employees as required by law; (2) hiring employees or subcontractors necessary to perform the Work; (3) providing any and all employment benefits, including, but not limited to, annual leave, sick leave, paid holidays, health insurance, retirement benefits, and disability insurance; (4) payment of all federal, state and local taxes, income or employment taxes, and, if Contractor is not a corporation, self-employment (Social Security) taxes; (5) compliance with the Fair Labor Standards Act, 29 U.S.C. §§ 201, et seq., including payment of overtime as required by said Act; and (6) providing employee training, office or other facilities, equipment and materials for all functions necessary to perform the Work. In the event the City provides training, equipment, materials, or facilities to meet specific City needs or otherwise facilitate performance of the Work, this shall not affect Contractor's duties hereunder or alter Contractor's status as an independent contractor. This paragraph does not create an affirmative obligation to provide any employee benefits not required by law.
40. **INSPECTION AND TESTING OF WORK; REJECTION OF WORK AND MATERIALS; TOOLS, PLANT, AND EQUIPMENT; MATERIAL SUBSTITUTION**
- (a) **Standards for Quality and Workmanship.** All materials, equipment, and supplies furnished by Contractor for permanent incorporation into the Work shall be new and of the quality standards specified. Unless otherwise specified, all material and workmanship shall meet the requirements in the applicable standards specifications of the American Society for Testing and Materials. If two or more brands, makes of material, devices, or equipment are shown or specified, each should be regarded as the equal of the other. First-calls and the finished product shall be equal to the best-accepted standards of the trade class. The finished product shall be equal to the best-accepted standards of the trade for the category of Work performed. The City's intent is to obtain a high-quality job that will operate and function with the lowest possible maintenance costs. Inspection standards will be established to ensure that this objective is achieved.
- (b) **Materials and Equipment Schedules.** The City shall have the right of prior approval for all materials or equipment incorporated into the Work. Within ten (10) days after the date of contract award and before any material or equipment is purchased, Contractor shall submit to the City's Project Manager a complete list of materials or equipment to be incorporated into the Work. The list shall include catalog cuts, diagrams, drawings, and such other descriptive data as may be required. The use of materials or equipment not in accordance with this Agreement may be rejected.
- (c) **Inspection.** The Work and all materials or equipment used therefor are subject to inspection by the City at all times in order to ensure compliance herewith. Upon request,

Contractor shall provide samples of the type and quantity of the various materials used in the Work, as determined and directed by the City. The City's Project Manager and inspector(s) shall be provided access to the Work wherever it is in preparation or progress. Contractor shall provide proper facilities for such access and inspection. Construction contractors shall maintain one complete copy of the drawings and specifications for the Work at the worksite, which shall be made available to the City upon request.

- (d) **Re-examination of Work.** The City may order re-examination of questioned Work and, if so ordered, the Work shall be uncovered by Contractor. If such Work is found to be in accordance with specifications, the City will pay the cost of re-examination and replacement. If such Work is found to be not in accordance with specifications, Contractor will pay such cost.
- (e) **Testing.**
- (i) The City may require that materials be tested prior to incorporation in the Work. In some instances, it may be expedient to make these tests at the source of supply. Therefore, upon request, Contractor shall furnish the City with information identifying the source of supply before incorporating material into the Work. Upon request, Contractor shall furnish two (2) copies of the manufacturer's certificate of compliance with these specifications covering manufactured items. All tests performed by a laboratory to ascertain whether the material, as placed, meets the required specification will be paid for by Contractor. This paragraph does not obligate the City to perform tests for acceptance of material or relieve Contractor of its responsibility to furnish satisfactory material.
- (ii) If the specifications, the City's instructions, laws, ordinances, or any public authority require any Work to be specifically tested or approved, Contractor shall give the City's Project Manager timely notice of its readiness for inspection. If inspection is by an authority other than the City's Project Manager, Contractor's Project Manager shall supply the City's Project Manager with 72 hours prior notice of such inspection. Inspections by the City's Project Manager will be made promptly and, where practicable, at the source of supply. If any Work should be covered up without the prior approval of the City's Project Manager, it shall, if required by the City, be uncovered for examination at Contractor's expense.
- (f) **Rejection of Work and Materials.** Contractor shall promptly notify the City of any defective material and shall not incorporate such material into the Work. The City may reject all Work and material that does not conform to this Agreement, which shall be removed and replaced with approved quality material at no additional cost to the City. If the City deems any portion of the Work unsatisfactory, Contractor shall rework those areas so that the total Work is completed in a manner satisfactory to the City. If disputed, Contractor may submit a Change Order, subject to the dispute resolution procedure.
- (g) **Tools, Plant, and Equipment.** If at any time before commencement of or during progress of the Work, tools, plant, or equipment appear to the City to be insufficient, inefficient, or inappropriate to secure the quality of Work or the proper rate of progress, the City may order Contractor to increase its efficiency, to improve its character, or to augment the number of or substitute new tools, plant, or equipment, as the case may be. Contractor shall conform to such order. If Contractor maintains that any such order is not in conformance with this Agreement, is unnecessary, or requires Contractor to incur excessive costs or



delays, Contractor may submit a Change Order, subject to the dispute resolution procedure. Failure of the City to make such demand shall not relieve Contractor of its obligation to secure the quality of the Work and the rate of progress necessary to timely complete the Work.

- (h) **Material substitution.** Except where otherwise indicated, whenever a material or a piece of equipment required in the Work is shown in the specifications by using the name of the proprietary product or that of a particular manufacturer or vendor, any material, equipment, device, or article that will in the City's opinion at least equally perform the same duties imposed by the general design, considering quality, workmanship, economy of operation, and suitability for the purpose intended, may be considered "equal" and substituted for the material or piece of equipment originally specified. In the event Contractor desires the City to consider an item for substitution, Contractor shall submit a written request, which shall give all pertinent details and comparisons of the substitute with the item specified. The City will notify Contractor in writing of its acceptance or rejection. In all cases, new material shall be used. Contractor shall pay all costs resulting from inspection or testing of materials or equipment proposed for substitution.
41. **LAND AND WATER RESOURCES.** Contractor shall not discharge or permit the discharge, directly or indirectly, of any fuels, oils, calcium chloride, acids, insecticides, herbicides, wastes, toxic or hazardous substances, or other pollutants or harmful materials, onto any lands or into any surface or ground waters, including, but not limited to, streams, lakes, rivers, canals, ditches, or reservoirs. Contractor shall investigate and comply with all applicable federal, state, county, and municipal laws concerning toxic wastes, hazardous substances, and pollution of surface and ground waters. If any waste, toxic or hazardous substance, or other material that can cause pollution, as defined in Section 403.031, F.S., is dumped or spilled in unauthorized areas, Contractor shall notify the City thereof within one (1) workday and thereafter shall remove the material and restore the area to its original condition. If necessary, contaminated ground shall be excavated and disposed of as directed by the City and replaced with suitable fill material, compacted and finished with topsoil, and planted as required to re-establish vegetation. All cleanup and disposal costs shall be borne by Contractor.
42. **LIENS.** Acknowledging that the City's property is not subject to liens, neither final payment nor payment of any part of the retainage shall become due until Contractor delivers to the City releases of all labor and material cost liens arising from Contractor's performance of the Work, including Contractor and any subcontractor(s), and an affidavit by Contractor stating that the releases and receipts include all labor and material costs for which a lien could be filed. If any subcontractor refuses to furnish Contractor a release or a receipt in full, Contractor may furnish to the City a bond satisfactory to the City, indemnifying the City against any such potential lien. If any lien or potential lien remains unsatisfied, the City may discharge the same forthwith and deduct the cost thereof from any amounts due to Contractor. In the event Contractor has been fully paid or the amount of such lien exceeds the amount due to Contractor, Contractor shall refund to the City all monies that the City paid in discharging such lien, including all costs and a reasonable attorney's fee. The discharging of such a lien by the City shall not constitute a waiver of any claims of defenses that Contractor may have against the lienor.
43. **NUISANCE.** Contractor shall exercise every reasonable means to avoid creating or continuing a public or private nuisance resulting from the Work, including, but not limited to: (1) excessive noise associated with radio or other forms of electronic entertainment for persons at the worksite; (2) dust from construction operations, and (3) the uncontrolled flow of surface waters.

44. **PERMITS AND LICENSES; COMPLIANCE WITH LAW.** Contractor shall comply with all applicable federal, state and local laws and regulations, including those pertaining to wages, health and safety. Contractor shall include this requirement in all subcontracts. All materials used and work performed must conform to the laws of the United States, the State of Florida and county and municipal ordinances. Contractor represents and warrants that it is duly licensed to perform the Work in accordance with the laws of the State of Florida and the county or municipality in which the Work is to be performed. For out-of-state contractors, Contractor warrants that it is authorized to do business within the state of Florida and registered with the Secretary of State. Unless otherwise provided in the Statement of Work, the responsibility of the parties for obtaining permits is apportioned as follows:
- (a) The City shall procure all permits required from the Florida Department of Environmental Protection, the U.S. Environmental Protection Agency, and the U.S. Army Corps of Engineers.
  - (b) Contractor shall procure any permits required by the county or municipality wherein the Work is located.
  - (c) Contractor shall: (i) give to the proper authorities all required notices relative to the Work; (ii) obtain and pay for all official permits and any professional or other licenses, code stamps, and inspections that are Contractor's responsibility; and (iii) furnish any bonds, security, or deposits required to permit performance of the Work; (iv) until the Work is accepted as substantially complete, comply with all conditions of governmental permits; and (v) resolve any issues resulting from a finding of noncompliance by any governmental agencies, including all costs for delays, litigation, fines, or other costs.
45. **PETROLEUM STORAGE TANKS.** Any petroleum storage tanks with a capacity of 55 gallons or greater that Contractor brings onto City property must be either double-walled or kept within secondary containment that will contain 110% of the tank volume.
46. **PROTECTION OF THE WORK, CITY EQUIPMENT, AND PROPERTY.** Contractor is responsible for the proper care of the Work and protecting the Work from damage until final acceptance by the City, whether or not the same has been covered by partial payments. Contractor is solely responsible for all City-owned equipment in its possession, if any. Contractor shall adequately protect and maintain all passageways, guard fences, lights, and other facilities as required by public authority or local conditions. Contractor shall conduct the Work so as to minimize damage to existing improvements, and shall restore, as nearly as practical, to its original condition, any such improvements damaged by its operations. In the event of temporary suspension of the Work, or during inclement weather, or whenever the City shall direct, Contractor shall carefully protect the Work from damage. If any Work is damaged due to Contractor's failure to so protect the Work, the loss shall be remedied at Contractor's expense. Contractor shall protect public and privately-owned property, structures, utilities, and work of any kind against damage or interruptions of service resulting from its activities. Contractor shall repair, replace, or restore any damage or loss to any public or private property to the City's satisfaction. Should Contractor fail to perform these obligations, the City may make good any such damage and deduct the cost thereof from Contractor's final payment.
47. **PUBLIC ENTITY CRIME.** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a

contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 F.S., for CATEGORY TWO (\$35,000) for a period of 36 months following the date of being placed on the convicted vendor list.

48. **RELEASE OF INFORMATION.** Contractor shall not publish or release any information related to performance of this Agreement, or prepare, publish, or release any news or press release in any way related to this Agreement, without prior City review and written consent.

49. **REMEDIES FOR NON-PERFORMANCE**

- (a) **City Remedies.** The remedies enumerated herein are non-exclusive. In addition to the remedies set forth below, the City may avail itself of any statutory and/or common law remedies not set forth herein. In the event of a breach, the City may terminate this Agreement for cause. Alternatively, the City may allow Contractor to correct the deficiency, or may take such action as is necessary to correct such deficiency through City action or that of a third party. Delay or failure by the City to enforce any right or remedy hereunder shall not impair, or be deemed a waiver of, any such right or remedy, or impair the City's rights or remedies for any subsequent breach of this Agreement.
- (b) **Contractor Correction of Deficiencies.** The City shall provide Contractor with written notice of deficiency. At the City's sole judgment and discretion, the City may afford an opportunity to correct said deficiency, in which event the notice shall specify the time allowed to cure. If Contractor disputes that a failure of performance has occurred, Contractor shall, nevertheless, perform the corrective action and may submit a request for a Change Order subject to the dispute resolution procedure. Unless authorized through a Change Order, the Completion Date shall not be extended in order to correct deficiencies. Contractor shall bear the cost of correcting all work of other contractors that is destroyed, damaged, or otherwise negatively impacted by its corrective action. Failure to take timely corrective action may result in termination for cause or the City pursuing alternative remedies, as provided herein.
- (c) **Alternative Remedies to Correct Deficiency.** If the City determines that it is not in its best interest for Contractor to correct incomplete or damaged Work caused by Contractor's failure of performance, the City may pursue any or all of the following remedies, in whole or in part: (1) accept the Work as is and deduct the reasonable value of the deficient Work from the Total Compensation; (2) complete the Work through the utilization of City employees and deduct the cost thereof from the Total Compensation; (3) contract with a third party to complete the deficient Work and deduct the cost thereof from the Total Compensation.
- (d) **City Technical Assistance.** The City may elect to provide technical assistance to Contractor in order to complete satisfactory performance of the Work. If the City is performing a function that Contractor is required to perform, the City may deduct the cost of providing such technical assistance from the Total Compensation. Prior to providing any such technical assistance, the City shall notify Contractor that it considers such assistance to be above and beyond its duties under this Agreement and that it intends to deduct the cost of providing such assistance from the Total Compensation. Contractor shall not be entitled to reject technical assistance when the City determines that such assistance is necessary to complete the Work.

50. **ROYALTIES AND PATENTS.** Contractor certifies that, to the best of its information and belief, the Work does not infringe on any patent rights. Unless provided otherwise herein, Contractor shall: (1) pay all royalties, patent, and license fees necessary for the Work; (2) defend all suits or claims for infringement of any patent rights, and (3) save and hold the City harmless from loss on account thereof; provided, however, that the City shall be responsible for any such losses when the utilization of a particular process or product of a particular manufacturer is specified by the City. If Contractor obtains information that the process or article so specified is a patent infringement, it shall be responsible for such loss unless it promptly so notifies the City.
51. **SAFETY.** For any Work that is to be performed on premises that are owned or controlled by the City (the Premises), Contractor has the sole and exclusive duty for the safety of the premises. Contractor shall provide and maintain sufficient protection for the safety of its employees and other persons who may utilize the Premises, and prevent damage to City property, materials, and equipment. Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ any unfit person or anyone not skilled in the work assigned. Neither Contractor nor its subcontractors shall allow or cause to be allowed any hunting or any weapons, animals, alcohol, or drugs, on or from the Premises or adjacent property. Contractor employees shall not park their vehicles or store equipment or materials adjacent to roads where it may be a hazard to traffic. A clear distance of at least 30 feet from the edge of the pavement or right-of-way shall be kept free of any obstacles unless otherwise authorized by the City. Contractor shall ensure that only authorized personnel are allowed on the worksite and shall post notices warning both employees and the public of all safety hazards created by Contractor.
52. **SUBSTANTIAL COMPLETION; PUNCH LIST.** Contractor shall notify the City in writing when it considers the Work to be substantially complete. "Substantially complete" is the point when the City can beneficially occupy its property and use the Work for its intended purpose, with only minor items remaining in order for the Work to be fully complete. Within thirty (30) days of receipt of such notice, the City shall review the Work and determine whether the Work is substantially complete. If the City agrees that the Work is substantially complete, the City shall, within said 30-day period, develop a list of items ("Punch List") required to render the Work complete, satisfactory, and acceptable in all respects. The Punch List shall be delivered to Contractor not later than five (5) days after it is developed. Contractor shall complete the Punch List items by the Completion Date; provided, however, that if the Completion Date is less than thirty (30) days after the date of delivery of the Punch List, the Completion Date shall be extended to thirty (30) days after delivery of the Punch List. Failure to include any corrective work or pending items not yet completed on the Punch List does not alter Contractor's responsibility to complete all construction services required by the Agreement. Upon completion of all Punch List items, Contractor may request payment of any remaining retainage. If the City disputes the completion of any items on the Punch List, it may withhold 150 percent of the estimated cost of completing any such items and shall return the remainder of the retainage to Contractor. Any disputed matters shall be resolved pursuant to the dispute resolution procedure of this Agreement.
53. **SURVEYS; PRESERVATION OF MONUMENTS; POINTS AND INSTRUCTIONS**
- (a) **Surveys.** When necessary to performance of the Work, unless otherwise provided in the Statement of Work, the City will furnish horizontal and vertical control necessary to lay out the Work, including horizontal reference point(s) and a vertical control benchmark within 200 feet of the site. The City will set the horizontal reference point(s) and vertical control only at the beginning of the job. Contractor is responsible for interim staking during the job and all staking and layout work not otherwise furnished by the City. Contractor

shall furnish all construction layout of the Work, including layout, centerline, and grade stakes for access roadways. Contractor shall furnish all personnel, equipment, and materials to make such surveys as are necessary to determine the quantity of Work performed. Field notes and computations for estimates shall be verified by the City's Project Manager as to the quantities estimated.

- (b) **Preservation of Monuments.** Contractor shall maintain and preserve all new and existing benchmarks, monuments, markers, reference points, and stakes established by others and/or the City. Should any of the aforesaid be destroyed or damaged by Contractor, the same shall be replaced by Contractor's licensed land surveyor at no cost to the City. Contractor shall be responsible for the cost of any deficiencies in the Work caused by such loss or disturbance.
- (c) **Points and Instructions.** Contractor shall provide reasonable and necessary opportunities and facilities for setting points and making measurements. Contractor shall not proceed until it has made a timely request to the City for, and has received, such points and instructions as may be necessary as the Work progresses. The Work shall be done in strict conformity with such points and instructions.

54. **USE OF COMPLETED PORTIONS OF THE WORK.** The City shall have the right to take possession of and use any completed or partially completed portions of the Work, notwithstanding the fact that the time for completing the entire Work or such portions may not have expired. Such taking of possession and use will not be deemed an acceptance of any Work not completed. If such possession and use increases the cost of or delays the Work, Contractor shall be entitled to a Change Order for extra compensation, or extension of time, as necessary, to offset the effect of such prior possession and use.

#### 55. **WARRANTY**

- (a) Contractor warrants that the Work, workmanship and material furnished by Contractor shall be new and of specified quality, shall conform to the requirements of this Agreement, shall be free from defects, and shall be free from any security interest, lien, or other encumbrances. This warranty shall remain in effect for a period of twelve (12) months after completion of the Work, unless otherwise specified herein. Any defective Work, workmanship, or material corrected during the warranty period shall be similarly warranted for twelve (12) months following its correction or for such other period as specified herein. The express warranty set forth herein shall not be exclusive and shall not act as a limitation upon any statutory or other warranty of any kind, express or implied, including any implied warranty of merchantability or fitness for a particular purpose.
- (b) In the event of breach of this warranty, Contractor shall take the necessary actions to correct the breach in the most expedient manner as dictated by then-existing circumstances. All costs incidental to the repair, replacement, redesign, and testing incurred as a result thereof, including the removal, replacement, and reinstallation of equipment in place when the Work was started, shall be Contractor's responsibility. Upon written notification of a breach, Contractor shall promptly send the necessary personnel to the project site to assume responsibility for corrective action. Time is of the essence. Contractor shall be afforded necessary and reasonable access to perform warranty work. If Contractor fails to promptly correct the breach, the City may take corrective action without waiving any other rights or remedies it may have, and Contractor shall reimburse the City for all expenses reasonably incurred in performing such corrective action.

## 56. WORK ORDERS

- (a) The City reserves the right to award Work Orders based on the ability to perform in a timely manner, availability of required equipment, cost of required equipment, past performance on similar work, availability of qualified staff, and other factors deemed critical to the performance of each Work Order. The City may, at its sole discretion, request a “not to exceed” cost for any Work Order as a method of determining award. The City makes no guarantees of any amount of work to be awarded under the Agreement. The City reserves the right to directly purchase and provide to Contractor all or part of the equipment or materials to be incorporated in the Work.
- (b) Contractor shall not proceed with any Work prior to the receipt of a written Work Order and shall commence the Work under each Work Order within fourteen (14) days of receipt, unless an alternate date is stated in the Work Order. All Work shall be done to the satisfaction of the City’s Project Manager or Work Order Manager and subject to the other terms of this Agreement. The Contractor must agree to the terms of the Work Order. Commencement of Work pursuant to a Work Order constitutes acceptance of all of the terms and conditions of the Work Order. A representative Work Order is attached as **Exhibit C**.
- (c) **Type of Work Order.** When services are needed, the City and Contractor shall agree upon the type of Work Order and the specifics of the Work Order.
- (i) Generally, a time and materials Work Order involves projects where field conditions, environmental or cultural resource preservation issues, subsurface and other physical conditions, or other aspects of the Work cannot be accurately defined. This often results in work being modified in the field by the City. Identification of the Work involved is typically concept level drawings with minimal details. The Work Order will describe the general nature of the Work, including specific deliverables, if applicable, along with the total number of hours, days, or weeks estimated for each task; the materials to be incorporated into the work, and the total authorized expenditure amount. If deliverables are specified and materials, equipment, or sub-contractors are necessary to complete the Work, the Work Order shall specify the estimated costs thereof. The City must approve the hiring of sub-contractors in order to ensure they are qualified to perform the Work and have been competitively procured. The Contractor is compensated for equipment and labor based upon the unit costs of this Agreement, and “Other Direct Costs” as defined in sub-paragraph (d)(iv), below. Invoices must be documented as to the number of hours worked and equipment and materials used sufficient for City audit in accordance with the unit costs of this Agreement and the Work Order. The City reserves the right to determine the means and methods of performing the Work and supplying materials.
- (ii) A fixed-price Work Order is issued when the extent and cost of the Work is agreed upon. It will describe with specificity the location, quantity, work limits, timeframes, deliverables, progress payments (if any), total cost, and any other matters pertaining to the Work. The fixed price includes all applicable permits, bonds, labor, equipment, supplies, project support, overhead and materials necessary to complete the Work. It is used when the scope of work can be clearly determined, such as when detailed design drawings and/or specifications and supporting documents are available and site conditions are known. It may include a detailed schedule of values, construction schedule, and any other necessary documents.

- (iii) A time and materials with not-to-exceed amount Work Order is utilized when a not-to-exceed cost is agreed upon for a time and materials Work Order. All of the terms of a time and materials Work Order apply, subject to the not-to-exceed amount. In addition, the deliverables must be described with the specificity of a fixed price Work Order.
- (d) **Additional Provisions Applicable to Time and Materials and Time and Materials with Not-to-Exceed Work Orders.**
  - (i) **Additional equipment and services.**
    - a. The City may issue a Work Order requiring the use of additional or specialized equipment not identified in the unit costs of the Agreement. The cost of such equipment may be identified separately and included in the specific Work Order to which it applies, or the Agreement may be amended through a Change Order with an amended cost schedule that includes such equipment. If deliverables are specified and sub-contractors are necessary to complete the Work, the Work Order shall specify the costs of the materials, equipment, and sub-contractors.
    - b. After a Work Order is issued, the City may require the use of material, equipment and/or subcontracted services not included in the original Work Order. A Change Order will be issued if the cost exceeds the "not to exceed" amount of the Work Order, or if the additional cost exceeds \$100,000.
    - c. If due to an emergency, the City determines that material, equipment and/or subcontracted services that were not included in the original Work Order are required, the City may authorize procurement thereof in a manner that most efficiently and effectively minimizes public risk and economic loss.
  - (ii) **Equipment substitution.** No provision hereof prohibits substitution of rented or leased equipment for unit cost equipment under the Agreement, or addition of rented or leased equipment not included in the Work Order or cost estimates, provided any such substitution or addition complies with the competitive procurement provisions of this paragraph and has been approved in advance in writing by the City. Should the Work require the use of individual equipment for longer than 30 days or 30 hours per week, the City may compare equipment weekly or monthly rental rates on the open market with the rates in the Cost Schedule and require Contractor to rent the equipment on the open market if the cost is lower than the Cost Schedule. The City will reimburse Contractor this rental cost (with allowable percentage markup in the Cost Schedule) plus the hourly rate for operator with fuel and operation and maintenance.
  - (iii) **Other Direct Costs.**
    - a. Subject to prior written City approval, the City will reimburse Contractor for materials purchased by Contractor and incorporated into the Work,

non-contract equipment, leases/rentals, subcontract work, bonds, and permits obtained by Contractor, including applicable sales tax ("Other Direct Costs"), plus the allowable percentage markup in the Cost Schedule, provided Contractor adheres to the following the competitive procedures:

- Cost is \$2,500.01 - \$15,000 – three documented quotes – oral, written, or on line; or a written explanation to City Purchasing Manager and approval from the City’s Purchasing Manager for not receiving three quotes.
  - Cost is greater than \$15,000 – at least three written quotes, reviewed and approved by City procurement staff, or a written explanation to and approval from the City’s Purchasing Manager for not receiving three quotes.
  - Documentation of solicitations where cost exceeds \$2,500 shall be submitted with the Contractor’s cost estimate. If a cost exceeds \$15,000, documentation shall include a complete bidders list and the request for quotes that was sent to each prospective bidder.
- b. Temporary facilities and temporary use materials required for erosion control and dewatering operations may be considered as Other Direct Costs upon approval by the City.
- c. Only equipment or materials that are incorporated into the Work and contracted services directly related to the Work qualify for compensation as Other Direct Costs. Compensation shall not be provided for any other costs associated with the Work not identified on the Cost Schedule or Work Order.
- (iv) The City reserves the right to reject any proposed subcontractors.
- (e) **Invoicing.** In addition to the general provisions in **PAYMENT OF INVOICES**, supporting documentation shall include:
- (i) **Time and Material Work Orders:** (hourly billing for labor and/or equipment and materials):
- a. Name of employee and/or type of equipment
  - b. Employee position title/job classification (if applicable)
  - c. Hours worked and/or equipment utilized on a daily basis, as documented by Contractor’s Daily Record of Hours, signed by Contractor and City staff (attached hereto as revised by the City from time to time).
  - d. The approved charge rate for each classification of Contractor employee and/or equipment included in Cost Schedule, Attachment \_\_\_\_, and/or the Work Order authorizing the Work. In the absence of an individual rate in the Cost Schedule, the Contractor employee’s general classification rate may be utilized.
  - e. If billed for use of equipment not in the Cost Schedule, documentation of prior authorization for equipment used, including cost and estimated quantities.
  - f. Documentation of any required competitive procurement for equipment, subcontractors, or materials.



- g. Contractor's notarized affidavit shall be provided with the first invoice for those Work Orders not requiring a Payment Bond, stating that payment of subcontractors and materialmen shall be made pursuant to Section 218.735, F.S.
  - h. Proof of payment of subcontractors and materialmen for which Contractor has already received payment from the City. Proof may be in the form of (1) a cancelled check; (2) a receipt marked paid by subcontractor or materialman; (3) a waiver of claim executed by the subcontractor or materialman; (4) Contractor's sworn affidavit that all subcontractors and materialmen for which payment has been received from the City have been paid by the Contractor; or (5) any other form that has been pre-approved in writing by the City. For the final invoice purposes, proof of payment must be submitted not only as to amounts previously paid by the City, but also as to amounts included in the final invoice.
  - i. A copy of the original vendor invoice(s) for Other Direct Costs. Altered or amended vendor invoices shall be rejected. If a vendor's invoice is from a supplier other than the one providing the lowest quote, Contractor shall explain the reason for not using the lowest cost supplier. The City reserves the right to reduce the amount reimbursed if a competitive market analysis clearly demonstrates that the invoice exceeds market value. In no event shall Contractor charge the City for any subcontractor's work that exceeds the approved Cost Schedule.
  - j. Diversity Statement. If W/MBE subcontractors or suppliers are used, provide company names and amount spent with each. If no W/MBE subcontractors or suppliers are used, so indicate.
  - k. Contractor may provide a detailed invoice with supporting information, or alternatively, may provide a summary invoice with the information provided from Contractor's payroll or other records as supporting backup material.
- ii. **Fixed Price Work Orders:**
- a. Description of the Work that has been completed in accordance with the progress/payment schedule of the Statement of Work for the Work Order.
  - b. Certification that the Work for which payment is requested has been completed in accordance with the Statement of Work for the Work Order, in a format approved by the City Project Manager.
  - c. Proof of payment of subcontractors and materialmen as described above for Type 1 Work Orders.
  - d. Diversity Statement. If W/MBE subcontractors or suppliers are used, provide company names and amount spent with each. If no W/MBE subcontractors or suppliers are used, so indicate.
- iii. **Time and Materials with Not-to-Exceed Work Orders:**
- a. Description and certification of completion of the work as described above for Fixed Price Work Orders.
  - b. Hourly billing information for Time and Materials Work Orders, as described above.
  - c. Proof of payment of subcontractors and materialmen as described above for Time and Materials Work Orders.

57. **WORK SCHEDULE.** As per General Conditions.
58. **CONTRACT INTERPRETATION.** In the event of a conflict between the terms of this Agreement and the General Conditions, the term of the General Conditions shall prevail.
59. **ENTIRE AGREEMENT.** The terms of this Agreement supersede any and all prior or contemporaneous understandings, agreements and representations and constitute the final and complete understandings of the parties.

**ADDITIONAL PROVISIONS  
(In Alphabetical Order)**

**DEFINITIONS**

**ADDENDA:** Written or graphic instruments issued prior to the opening of Bids which make additions, deletions, or revisions to the solicitation or contract documents.

**AGREEMENT:** The written contract between the City and Contractor covering the Work, which includes all documents attached to this Agreement or incorporated herein by reference. The words “contract” and “Agreement” are synonymous in these documents.

**AMENDMENT:** Any written change made to the terms and conditions of the Agreement.

**BID:** The written offer of Respondent (when submitted on the reproduced approved forms) to perform the Work and furnish the necessary materials in accordance with the provisions of this Agreement.

**BID BOND:** The security furnished with a Bid to guarantee that Respondent will enter into a contract and execute, deliver, and perform all other obligations described in the Invitation for Bids if Contractor receives a Notice of Intent to Award the contract from the City.

**CHANGE ORDER:** A written agreement of the parties after the Commencement Date to amend this Agreement so as to modify the Scope of Work or the Total Compensation or provide for an extension of time.

**COMMENCEMENT DATE:** The date upon which the Work is authorized to proceed.

**COMPLETION DATE:** The date by which the Work is required to be completed.

**CONTRACTOR:** Contractor, its officers, employees, agents, successors, and assigns.

**CONTRACTOR’S PROJECT MANAGER:** The individual designated by the Contractor to be responsible for overall coordination, oversight, and management of the Work for Contractor.

**CONTRACTOR’S SUPERINTENDENT:** Contractor’s representative who is present during the progress of the Work and authorized to receive and fulfill instructions from the Contractor’s Project Manager or the City.

**CPM or CRITICAL PATH METHOD:** The use of calculated task duration with no regard for probabilities. A path has no float and is the longest path through the project. A critical path encompasses those project activities that are crucial and cannot be shifted, having calculated task duration. They are the important activities driving the project. Float belongs to the City.

**DAY:** Each day shown on the calendar.

**DELIVERABLES:** All Work that is to be performed pursuant to the Scope of Work, in whole or in part, including, but not limited to, all equipment or materials that are incorporated within the Work.

**CITY:** The City of St. Augustine, its Commission, officers, agents, and employees.

**CITY'S PROJECT MANAGER:** The City employee designated by the City to be responsible for overall coordination, oversight, and management of the Work for the City.

**CITY'S SUPPLEMENTAL INSTRUCTION:** Instructions issued by the City's Project Manager to make minor changes in the Work not affecting the Total Compensation or the Completion Date, and consistent with the purpose of the Work.

**FINAL RELEASE OF LIENS:** The instrument that is to be signed by Contractor and submitted to the City upon completion of the Work showing that all bills from subcontractors have been paid.

**INSPECTOR:** The City's Project Manager or an authorized representative of the City who is assigned to inspect the Work.

**PERFORMANCE AND PAYMENT BOND:** The security furnished by Contractor and surety in either the form provided or in a form approved by the City as a guarantee that Contractor will perform all of its contractual obligations in accordance with the terms of the Agreement and pay in full all bills and accounts for material, labor, services, and supplies used directly or indirectly in the performing the Work.

**PERSON:** Any individual, partnership, society, association, joint stock company, corporation, estate, receiver, trustee, assignee, referee, or capacity, whether appointed by a court or others, and any combination of individuals.

**PRINCIPAL:** When used in a Bid, Performance and Payment Bond, the word "principal" means the same as the word "Contractor."

**REQUEST FOR BIDS:** An advertised solicitation for sealed competitive Bids, with the title, date, and hour of the public opening designated. It includes a detailed description of the goods and/or services sought, the date for submittal of Bids, and all contractual terms and conditions.

**RESPONDENT:** Any person who submits a Bid in response to a Request for Bids or a proposal in response to a Request for Proposals.

**SCOPE OF WORK:** The City's written directions, requirements and technical specifications for completing the Work. Standards for specifying materials or testing that are incorporated therein by reference shall have the same force and effect as if fully set forth therein.

**SUBCONTRACTORS:** Those persons having a direct contract with Contractor relating to performance of the Work, including one who furnishes material worked into a special design in accordance with the plans or specifications of the Work, but not including one who merely furnishes material.

**SURETY:** The entity bound by a bond to be liable for Contractor's satisfactory performance of the Work and payment of all debts pertaining thereto.

**TOTAL BID:** The total cost to be paid to Contractor for completion of the Work.

**TOTAL COMPENSATION:** The total funds to be expended pursuant to this Agreement upon satisfactory completion of the Work.

**WORK:** All labor, materials, equipment, transportation, supporting documentation, and other products, services, or facilities necessary for complete performance of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate, each of which shall be deemed an original on the day and year first above written.

CITY OF ST. AUGUSTINE,  
FLORIDA a municipal corporation

ATTEST:

Name:

Darlene Galambos  
Darlene Galambos, City Clerk

By:

Meredith Breidenstein

Printed Name: ~~Meredith Breidenstein~~

Title: Assistant City Manager

Date: 10/9/2020

(SEAL)



Signed, sealed and delivered  
in the presence of:

Melissa Kimball  
Witness

Printed Name: Melissa Kimball

By:

James J. Collier

Printed Name: James J. Collier

Title: Authorized Representative

Date: 10/5/2020

ENGINEERED SPRAY SOLUTIONS LLC

Witness

Jessica Morates  
Printed Name: Jessica Morates

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

Isabelle C. Lopez  
Isabelle C. Lopez, City Attorney

- Exhibit A: Scope of Work/Technical Specifications
- Exhibit B: Insurance Requirements
- Exhibit C: Work Order Authorization (sample)
- Exhibit D: Unit Price Schedule
- Attachment #1 - Requirements for: 2 CFR Part 200 Appendix II
- Attachment #2 - Requirement for HUD 24 CFR 85.36
- Attachment #3 - Additional Requirements
- Attachment #4 - David-Bacon Wage Decisions
- Attachment #5 - COSA As-Built Requirements
- Attachment #6 - Electronic Drawing File Standards

*a*

**SECTION 01001**  
**GENERAL WORK REQUIREMENTS**

**PART 1 - GENERAL**

**1.01 NOTICES**

A. All notices or other papers required to be delivered by the Contractor to the City shall be delivered to the City of St. Augustine, Public Works Department, 75 King Street, St. Augustine, FL 32084.

**1.02 WORK TO BE DONE**

A. The Contractor shall furnish all labor, materials, equipment, tools, services, and incidentals to complete all work required by these specifications and as shown on the RFP documents, at a rate of progress which will ensure completion of the Work within the Work Order Time contracted.

B. The Contractor shall perform the Work complete, in place, and ready for continuous service, and shall include repairs, testing, permits, clean up, replacements, and restoration required as a result of damages caused during this construction.

C. The Contractor shall comply with all City, County, State, Federal, and other codes, which are applicable to the proposed Work.

D. All newly constructed Work shall be carefully protected from injury in any way. No wheeling, walking, or placing of heavy loads on it shall be allowed and all portions damaged shall be reconstructed by the Contractor at his own expense.

E. Scope of Work: See Section 01010 "Summary of Work" and the Unit Price Schedule for details.

**1.03 DRAWINGS AND PROJECT MANUAL**

A. The Work shall be performed in accordance with the Specifications prepared by the City. All work and materials shall conform to the City Public Works Standards and Specifications Design Manual and Details, latest edition or as indicated in the Work Order.

B. The Contractor shall verify all field dimensions, quantities and details included in each Work Order or other data received from the City, and shall notify same, in writing, of all errors, omissions, conflicts and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory Work, faulty construction or improper operation resulting there from, nor from rectifying such conditions.



C. All schedules are given for the convenience of the City and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quantity of materials and equipment included in the Work to be done under this Contract.

D. Intent:

A. All Work called for in each Work Order applicable to this Contract, but not shown or referenced in the respective Work Order or contract shall be of like effect as if shown or mentioned in both. Work not specified either in the Work Order or in the Contract but involved in carrying out their intent or in the complete and proper execution of the Work, is required and shall be performed by the Contractor as though it were specifically delineated or described.

B. Items of material, equipment, machinery, and the like may be specified in the Work Order and not in the Contract Specifications. Such items shall be provided by the Contractor in accordance standards referenced in the Contract.

C. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any Work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

E. The more detailed work requirement will take precedence of the Contract and Work Order documents.

#### 1.04 PROTECTION AND RESTORATION

A. The Contractor shall be responsible for the preservation of all public and private property and shall use every means of protection necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the Work on the part of the Contractor, such property shall be restored by the Contractor, at his expense, to a condition similar or equal to that existing before the damage was done, or the Contractor shall make good the damage in other manner acceptable to the City.

B. Protection of Trees and Shrubs

A. Protect with boxes or other barricades.

B. Do not place excavated material so as to injure trees or shrubs.

C. Install pipelines in short tunnels between and under root systems.

D. Support trees to prevent root disturbance during nearby excavation.

C. Tree and Limb Removal

A. Tree limbs, which interfere with equipment operation and are approved for pruning, shall be neatly trimmed and the tree cut coated with tree paint.

B. The City may order the Contractor, for the convenience of the City, to remove trees along the line or trench excavation. The Contractor shall obtain any permits required for removal of trees. Ordered tree removal shall be paid for under the appropriate Contract

Items.

D. Trees or shrubs destroyed by negligence of the Contractor or his employees shall be replaced by the Contractor with new stock of similar size and age, at the proper season and at the sole expense of the Contractor.

E. Lawn Areas: All lawn areas disturbed by construction shall be replaced with like kind to a condition similar or equal to that existing before construction. Where sod is to be removed, it shall be carefully removed, and the same re-sodded, or the area where sod has been removed shall be restored with new sod in the manner described in the applicable section.

F. Where fencing, walls, shrubbery, grass strips or area must be removed or damaged incident to the construction operation, the Contractor shall, after completion of the work, replace or restore to the original condition.

G. The cost of all labor, materials, equipment, and work for restoration shall be deemed included in the appropriate Contract Item or items, or if no specific item is provided therefore, as part of the overhead cost of the Work, and no additional payment will be made, therefore.

#### 1.05 PUBLIC NUISANCE

A. The Contractor shall not create a public nuisance including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.

B. Noise control shall be in accordance with the City of St. Augustine Code of Ordinances Chapter 11 article IV.

C. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

#### 1.06 WORK HOURS

A. Weekday work hours will be from 7 AM to 7 PM and 10 AM and 6 PM on weekends. Unless specifically authorized in writing from the City.

#### 1.07 MAINTENANCE OF SERVICE

A. The Contractor shall, prior to interrupting any utility service (water, sewer, etc.) for the purpose of performing work, contact the City and make arrangements for the interruption which will be satisfactory to the City.

B. Utilities that are damaged during construction shall be repaired by the Contractor and service restored within 4-hours of the damage. The City retains the option of repairing any damage to storm or Sanitary utility pipes in order to expedite service to the customers. The Contractor will remain responsible for all costs associated with the



repair.

#### 1.08 TRANSFER OF SERVICE

A. When the City has accepted the rehabilitation of a manhole and placed it into operation, the transfer of service is complete. The Contractor may begin the work of removing the existing or temporary facilities.

#### 1.09 LABOR

A. Supervision: The Contractor shall supervise and direct the Work efficiently and with his best skills and attention. The Contractor shall have a competent, English speaking superintendent or representative, who shall be on the site of the Project at all working hours, and who shall have full authority by the Contractor to direct the performance of the Work and make arrangements for all necessary materials, equipment, and labor without delay.

#### 1.10 QUALIFICATION

A. Company:

1. Documented company QA/QC plan and procedures for all work included in contract PW2020-05.
2. Storm Sewer Cleaning.
  - a. A minimum total of 3 years cleaning and CCTV experience on municipal storm drains.
  - b. A total of five (5) projects cleaning municipal storm drains.
  - c. Experience with cleaning and CCTV of municipal storm drains 24 to 60" diameter.
  - d. Provide name, title, phone number, address of a minimum of 2 references documenting experience with cleaning and CCTV of storm drains 24 to 60" diameter.

B. CCTV inspection shall require a minimum of 1 certified personnel with PACP certifications.

1. One (1) person shall have PACP certification that will lead or supervise each field CCTV crew for inspection and a minimum of 2-years in the role of a lead person.
2. This person shall also have experience in the role as a QA/QC management supervisor

C. Each inspection supervisor shall be NASSCO PACP/MACP certified. Use of PACP/MACP certified technicians to review/document defects in the office (post process) is not acceptable.

1. The CCTV Contractor must have an internal quality assurance/quality control (QA/QC) program in place and all inspection data shall be subjected to the procedures prior to submittal to the City. The City will perform QA/QC audits on submitted data.
2. A QA/QC shall be performed by NASSCO MACP and PACP certified personnel.






D. Lining or Coating Applicators

1. Ten (10) recent references of Applicator applying approved coating/lining on a minimum of 12 vertical feet and applied a minimum of 5000 vertical feet within the last 5 years.

E. Certifications and License.

1. NASSCO Pipeline Assessment and Certification Program (PACP), Manhole Assessment and Certification Program (MACP) certifications.
2. OSHA 30-hour training certificate for Site Superintendent.
3. OSHA 10-hour training certificate for all other personnel.
4. All personnel involved with site work to have separate Fall Protection and Confined Space Training.
5. State of Florida Certified Underground Utility and Excavation Contractors License or current Florida State General Contractor License. 
6. Manufacturer's applicator certificate.

1.11 MATERIALS AND EQUIPMENT

A. MANUFACTURER

A. All transactions with the manufacturers or Subcontractors shall be through the Contractor, unless the Contractor and the City request that the manufacturer or Subcontractor communicate directly with the City. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.

B. All workmanship and materials shall be of the highest quality. The equipment shall be the product of manufacturers who are experienced and skilled in the field with an established record of research and development. No equipment will be considered unless the manufacturer has designed and manufactured equipment of comparable type and size and have demonstrated sufficient experience in such design and manufacture.

C. No material shall be delivered to the Site without prior submittal approval from the City.

D. All apparatus, mechanisms, equipment, machinery, and manufactured articles for incorporation into the Project shall be the new (most current production at time of bid) and unused standard products of recognized reputable manufacturers.

E. Manufactured and fabricated products:

1. Design, fabricate and assemble in accord with the best engineering and shop practices.
2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
3. Any two or more pieces of material or equipment of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer.
4. Products shall be suitable for service conditions as specified and as stated by manufacturer.
5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.



6. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

#### 1.12 MANUFACTURER'S SERVICE

- A. Where service by the manufacturer is specified to be furnished as part of the cost of the manhole rehabilitation products, the expense of the Work shall be at incorporated into the respective unit price.
- B. The services provided shall be by a qualified manufacturer's service representative to demonstrate the product to City personnel, check and verify the completed installation and approve the installed products. Such services cover the period of time and for the number of trips required to meet the technical specification requirements
- C. The services shall further demonstrate to the City complete satisfaction that the equipment will satisfactorily perform the functions for which it has been installed.

#### 1.13 INSPECTION AND TESTING

- A. General
  - A. All materials and equipment furnished by the Contractor shall be subject to the inspection, review and acceptance of the City and meet the requirements of the technical specifications, codes and standards. If in the testing of any material or equipment it is ascertained by the City that the material or equipment does not comply with the Contract, the Contractor shall be notified thereof, and the Contractor will be directed to refrain from delivering said material or products, or to remove it promptly from the Site or from the Work and not accepted by the City shall be replaced with acceptable material or products, without cost to the City.
  - B. The Contractor shall give notice in writing to the City sufficiently in advance of his intention to commence the preparation of materials or products for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the preparation or application of materials. Upon receipt of such notice, the City may arrange to have a representative present at such times during the preparation, application, or testing of the materials or products; or the City will notify the Contractor that the inspection will be waived.
  - C. When inspection is waived or when the City so requires, the Contractor shall furnish to the City authoritative evidence in the form of Certificates of Proper use, surface preparation and installation from the Manufacturer. This certificate will state that materials used in the Work have been manufactured, installed and tested in conformity with their instructions, applicable standards and in accordance with the Contract Specifications. These certificates shall be notarized and accompany results of physical tests and chemical analysis, where necessary, that have been made directly on the product or on similar products of the manufacturer.
  - D. The Contractor must comply with these provisions before acceptance of the applied material or products by the City. Such inspections or acceptance by the City shall not release the Contractor from the responsibility for furnishing materials meeting the

requirements of the Contract Specifications.

B. Cost

A. Contractor shall employ and pay for the services of an independent testing laboratory to perform testing indicated in the Contract Specifications, or at the City's discretion to ensure conformity with the Contract Specifications.

B. The cost of field leakage and pressure tests and shop tests of materials and equipment specifically called for in the Contract Specifications shall be borne by the Contractor. Such costs shall be deemed to be included in the Contract unit price.

C. The Contractor shall notify the City a minimum of 48-hours in advance of scheduled field tests.

D. The Contractor shall pay for all work required to uncover, remove, replace, retest, etc., any work not tested due to the Contractor's failure to provide the 48-hours advance notice or due to failed tests.

C. Shop Testing

A. Each material or system for which pressure, duty, capacity, rating, performance, and function or special requirements are specified shall be tested in the shop of the manufacturer in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Specifications. No such material or products shall be shipped to the worksite until the City notifies the Contractor, in writing, that the results of such tests are acceptable.

B. The manufacturing company shall provide five (2) copies of the manufacturer's actual shop test data and interpreted results signed by a responsible official of the manufacturing company and notarized, showing conformity with the Contract Specifications as a prerequisite for the acceptance of any materials or products used in manhole rehabilitations. The cost of shop tests and of furnishing manufacturer's preliminary and shop test data shall be in the Contract unit price.

D. Field Testing:

A. The City may at any time during the progress of the Work, request additional testing beyond that which is specified in the Contract Specifications. This testing will be at the City's expense. Contractor shall:

1. Arrange and have requested testing performed.
2. Secure and deliver to the laboratory adequate quantities of representative samples of materials proposed to be used and which require testing.
3. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other material mixes, which require control by the testing laboratory.

E. Demonstration Tests: Upon completion of the Work and prior to final payment, all products installed under this Contract shall be subjected to acceptance or demonstration tests as specified or required to provide compliance with the Contract Specifications. The Contractor shall furnish all labor, fuel, energy, water and all other equipment necessary for the demonstration tests at no additional cost to the City.

F. Final Inspection: Prior to preparation of the final payment application, a final inspection will be performed by the City to determine if the Work is properly and satisfactorily constructed in accordance with the requirements of the Contract Specifications.

G. Inspection by Other Agencies: The Florida Department of Transportation, the Florida Department of Environmental Protection, and other authorized governmental agencies shall have free access to the site for inspecting materials and work, and the Contractor shall afford them all necessary facilities and assistance for doing so. Any instructions to the Contractor resulting from these inspections shall be given through the City. These rights of inspections shall not be construed to create any contractual relationship between the Contractor and these agencies.

#### 1.14 PROJECT SITE AND ACCESS

##### A. RIGHT-OF-WAY AND EASEMENTS

A. The use of public streets and alleys shall be such as to provide a minimum of inconvenience to the public and to other traffic. Any earth or other excavated material shall be removed by the Contractor and the streets cleaned to the satisfaction of the City.

B. The Contractor shall not enter or occupy private land outside of easements, except by written permission of the property owner.

C. At the time of the Pre-Construction meetings, the Contractor shall become fully acquainted with the status of all easements.

##### B. ACCESS

A. Neither the material removed, nor the materials or equipment used in the construction of the Work shall be so placed as to prevent free access to all fire hydrants, valves, pumping stations or private utility facilities.

B. Access to businesses located adjacent to the project site must always be maintained. Contractor may prearrange the closing of business access with the business Owner. Such prearranged access closing shall not exceed two (2) hours. Property shall be restored, and all construction debris removed within 48-hours of acceptance of each manhole rehabilitation.

C. Contractor agrees that representatives of the City and any governmental agents will have access to the Work wherever it is in preparation or progress and that the Contractor shall provide facilities for such access and inspection.

#### 1.15 UTILITIES

##### A. UTILITY CONSTRUCTION

A. Public utility installations and structures shall be understood to include all poles, tracks, pipes, wires, conduits, house service connections, vaults, manholes and all other appurtenances and facilities pertaining thereto, whether owned or controlled by governmental bodies or privately owned by individuals, firms or corporations, used to serve the public with transportation, traffic control, gas, electricity, telephone, sewerage, drainage or water. Other public or private property, which may be affected by the Work, shall be deemed included hereunder.

B. All open excavations associated with manhole rehabilitations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means. The Contractor shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by pedestrians and workmen. Bridges provided for access to private property during rehabilitations shall be removed when no longer required.

C. If any excavation becomes a hazard, or if it excessively restricts traffic at any point, the City may require special construction procedures. As a minimum, the Contractor shall conform to the following restoration procedures:

1. Interim Restoration: All excavations shall be backfilled and compacted as specified by the end of each working day or proper barricades shall be in place before the end of the workday. For excavations within existing paved areas; lime rock base or soil cement base (match existing) shall be spread and compacted to provide a relatively smooth surface free of loose aggregate material. At the end of each workweek, the asphaltic surface course shall be completed and opened to traffic. Contractor shall coordinate his construction activity including density tests and inspections to allow enough time to achieve this requirement. All driveway cuts shall be backfilled, compacted, and lime rock base spread and compacted immediately after installation. Contractor shall coordinate with the individual property owners prior to removing the driveway section.
2. All materials and products shall be neatly stored in a location, which will cause the least disturbance to the public. All debris shall be removed and properly disposed of by the end of each working day.
3. Final Restoration Overlay: After completing all installations, testing, and acceptance of the rehabilitation work by the City, final restoration shall be performed. Any additional restoration required after testing shall be repaired in a timely manner at no additional cost to the City.
4. Maintenance of all restored facilities shall be the Contractor's responsibility. This maintenance shall be performed on an on-going basis during construction. The Contractor's Progress Schedule shall reflect the above restoration requirements.
5. Additional Restoration for Work in Business, Commercial or Historic Districts: The Contractor shall restore all private property, damaged by construction, to its original condition. Access to businesses located adjacent to the project site must always be maintained. Contractor may prearrange the closing of business accesses with the business owner. Such prearranged access closing shall not exceed two (2) hours. Property drainage and grading shall be restored within 24-hours of backfilling trench.

## B. EXISTING UTILITIES

A. The locations of all existing underground piping, structures and other facilities are not provided in Work Orders. The Contractor will need to be requested "one call" for locates as needed for rehabilitation work. It is the Contractor's responsibility to verify all existing underground piping, structures and other facilities.

B. The Contractor shall, at all times, employ acceptable methods and exercise reasonable care and skill so as to avoid unnecessary delay, injury, damage or destruction of existing utility installations and structures; and shall, at all times in the performance of the Work,

avoid unnecessary interference with, or interruption of, utility services; and shall cooperate fully with the owners thereof to that end.

C. When existing facilities are found to conflict with the Work, the City reserves the right to modify the scope of work in the respective Work Order to avoid interference with existing facilities and associated delays.

D. All utilities, which do not interfere with the work, shall be carefully protected against damage. Any existing utilities damaged in any way by the Contractor shall be restored or replaced by the Contractor at his expense as directed by the City. Any existing facilities, which require operation to facilitate repairs, shall be operated only by the owner of the respective utility.

E. It is the responsibility of the Contractor to ensure that all utility and/or poles, the stability of which may be endangered by the proximity to rehabilitation work, be temporarily stayed and/or shored in position while work proceeds in the vicinity of the pole and that the utility or other companies concerned be given reasonable advance notice of any such excavation.

#### C. NOTICES

A. All governmental utility departments and other owners of public utilities, which may be affected by the Work, will be informed in writing by the Contractor one (1) week after the execution of the Work Order covering the Work. Such notice will be sent out in general and directed to the attention of the governmental utility departments and other owners of public utilities for such installations and structures as may be affected by the Work.

B. The Contractor shall comply with Florida Statute 553.851 regarding protection of underground gas pipelines. Evidence of notification to the gas pipeline owner shall be furnished to the City within one (1) week after the execution of the Work Order.

C. It shall be the Contractor's responsibility to contact utility companies at least 72-hours in advance of any excavations required to perform manhole rehabilitations in any area so maintenance personnel can locate and protect facilities, if required by the utility company.

D. The Contractor shall give a minimum five (5) working day notice to utility personnel prior to interrupting a utility service (water, sewer, etc.).

E. Note that notification requirements associated with manhole rehabilitations are included in other Sections that are part of this contract.

### 1.16 RELATED CONSTRUCTION REQUIREMENTS

#### A. PUBLIC INFORMATION OFFICER

1. The Contractor shall provide community interaction and coordination through Work Order Manager (WOM). The WOM will provide resolution to complaints and problems from community members affected by the construction for the entire project duration. The City maintains a 24-hour phone number for citizens to call in cases of emergency. The City will field these calls, provide answers to questions, research issues with the project team or appropriate agencies and follow up each complaint in a timely manner. The WOM will maintain a daily diary of call and/or interactions with the community, as well as a complaint log chronicling all issues and proposed resolutions.

2. The WOM shall attend the project progress meetings and provide the project team with a report of public issues since the last progress meeting. The WOM will also disseminate roadway closures, temporary and permanent restoration and other relevant construction information to the community, as well as, when appropriate, to the media, emergency services personnel and other interested agencies.
3. The designated WOM shall have previous experience in providing similar services.

B. TRAFFIC MAINTENANCE

- A. Refer to Section 01570 – Maintenance of Traffic

C. BARRIER AND LIGHTS

- A. The Contractor shall exercise extreme care in the conduct of the Work to protect health and safety of the workmen and the public. The Contractor shall provide all protective measures and devices necessary, in conformance with applicable local, state and federal regulations. Protective measures shall include but are not limited to barricades, warning lights/flashers and safety ropes.
- B. All equipment and vehicles operating within 10-feet of the roadway shall have flashing strobe lights attached.

D. DUST AND EROSION CONTROL

- A. The Contractor shall prevent dust nuisance from his operations or from traffic.
- B. Contractor is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective.
- C. Refer to the City of St. Augustine Standards and Specifications Design Manual and Standards Storm Water Pollution Prevention Plan Sheet N-1 for erosion control requirements associated with manhole rehabilitation work.

E. LINES AND GRADES

- A. Maintain existing lines and grades of the rehabilitated manholes. Where frames and covers are replaced refer to grade requirements in Section 02775, Wastewater Manhole Rehabilitation paragraph 3.19.

F. TEMPORARY CONSTRUCTION

- A. Temporary fences: If, during the course of the Work, it is necessary to remove or disturb any fencing, the Contractor shall at his own expense, provide a suitable temporary fence which shall be maintained until the permanent fence is replaced.
- B. Responsibility for Temporary Structures: In accepting the Contract, the Contractor assumes full responsibility for the sufficiency and safety of all temporary structures or work and for any damage which may result from their failure or their improper construction, maintenance or operation.

G. DAILY REPORTS

- A. The Contractor shall submit to the City's Representative daily reports of construction activities excluding non-workdays. The reports shall be complete in detail and shall include the following information:
  1. Days from Work Order commencement date.
  2. Weather information



3. Work activities, including manpower, equipment and daily production quantities.
  4. Major deliveries
  5. Visitors to site
  6. Test records
  7. New problems, and
  8. Other pertinent information
- B. A similar report shall be submitted for/by each Subcontractor.
- C. The report(s) shall be submitted to the City Representative within 2 days of the respective report date. Each report shall be signed by the Contractor's Superintendent or Project Manager.
- D. If a report is incomplete, in error, or contains misinformation, a copy of the report shall be returned by the City Representative to the Contractor's Superintendent or Project Manager with corrections noted. When chronic errors or omissions occur, the Contractor shall correct the procedures by which the reports are produced.

#### H. CLEANING

##### A. During Construction

1. During construction of the Work, the Contractor shall, at all times, keep the Site free from material, debris and rubbish as practicable and shall remove the same from any portion of the Site if, in the opinion of the City, such material, debris, or rubbish constitutes a nuisance or is objectionable.
2. Provide on-site containers for the collection of waste materials, debris and rubbish and remove such from the Site periodically by disposal at a legal disposal area away from the Site.
3. The Contractor shall remove from the site all surplus materials and temporary structures when no longer necessary to the Work at the direction of the County.

##### B. Final Cleaning

1. At the conclusion of the Work, all equipment, tools, temporary structures and materials belonging to the Contractor shall be promptly taken away, and the Contractor shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances. Employ skilled workmen for final cleaning. Thoroughly clean all installed equipment and materials to a bright, clean, polished and new appearing condition. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
2. The Work site surrounding the rehabilitated manhole shall be returned to the pre-construction condition documented by video and photographs. The condition is to be equal or better than what existed before the Work.
3. Prior to final completion, or City beneficial occupancy, Contractor shall conduct an inspection of interior and exterior surfaces, and all work areas to verify that the entire Work is clean. The City will determine if the final cleaning is acceptable or political subdivision having jurisdiction.

#### PART 2 - PRODUCTS (NOT USED)

**PART 3 - EXECUTION (NOT USED)**

END OF SECTION

**SECTION 01010**  
**SUMMARY OF WORK**

**PART 1 - WORK COVERED BY CONTRACT DOCUMENTS**

1.01 General

- A. This Contract includes the inspection and rehabilitation of Sanitary Sewer manholes, Lift Station Wet Wells, Stormwater Structures, and cleaning and inspection of Stormwater culverts and drains and Sanitary sewer mains as described in Sections of the Annual Contract PW2020-05. ▲
- B. Upon the City's acceptance of proposed inspections and/or rehabilitations work a purchase order requisition will be made followed by issuance of a Work Order. ▲
- C. The scope of each work order will vary. Initially inspections will be made on individual collection basins. ▲
- D. Contract Documents
  - 1) Section 01001 General Work Requirements
  - 2) Section 01010 Summary of Work
  - 3) Section 01200 Project Meetings
  - 4) Section 01300 Submittals
  - 5) Section 01516 Collection System Bypass
  - 6) Section 01570 Maintenance of Traffic
  - 7) Section 02761 Cleaning Storm and Sanitary Sewer Systems ▲
  - 8) Section 02762 Televising Storm and Sanitary Sewer Systems ▲
  - 9) Section 02764 Televising Existing Manholes, Wet Wells, and Stormwater Structures ▲
  - 10) Section 02775 Wastewater Manhole, Lift Station Wet Well and Storm Water Structure Rehabilitation ▲
  - 11) City of St. Augustine (COSA) Standards and Specifications Design Manual and Details.
  - 12) Unit Price Schedule.
- E. Refer to section 02775 for qualifications for both manhole inspections and rehabilitations.
- F. Work that is covered with cleaning, inspections and rehabilitations in contract PW2020-05: ▲
  - 1) All submittals in accordance with section 01300.
  - 2) Attending and participating in work order pre-work meetings in accordance with section 01200.
  - 3) Submitting and periodically updating work schedules.
  - 4) Visual documentation of manholes both pre and post rehabilitation. ▲
  - 5) Maintenance of Traffic in accordance with section 01570.
  - 6) Collection system bypassing in accordance with section 01516.
  - 7) Distribute notices, door hangers, to all residents and businesses in the location of work.
  - 8) Site security and safety.



- 9) System type product application demonstrations for City personnel prior to application.
- 10) Externally eliminating infiltration.
- 11) Interior surface preparation.
- 12) Cleaning & Inspection of Sanitary Mains, Stormwater Culverts and Drains
- 13) Inspection and Rehabilitation of Sanitary Lift Station Wet Wells and Stormwater Structures.
- 14) Inspection of the Interior of Box Culverts
- 15) Repair or replacement of the manhole invert and bench including sealing of pipe penetrations.
- 16) Patching/lining/coating of manhole bench/invert, barrel, corbel/cone and chimney.
- 17) Sealing manhole frame/chimney.
- 18) Replace manhole frame and cover.
- 19) Adjusting frame/cover finished grading including roadway or sod repairs.
- 20) Providing and installing inflow dishes.
- 21) Providing and installing cover seals.
- 22) All restorations and cleanup.
- 23) Testing and documentation of each manhole rehabilitation.
- 24) Work will not include total reconstruction of the manhole or replacement.

#### 1.02 SEQUENCE OF WORK

- A. The Contractor shall establish his work sequence based on the use of crews to facilitate completion of construction and testing within the specified Contract Time.
- B. The Contractor shall submit a schedule and work sequence to the Owner at least five (5) days prior to the Notice to Proceed. Work on all utility lines shall be accomplished so that all facilities will stay in operation.

#### **PART 2 - PRODUCTS (NOT USED)**

#### **PART 3 - EXECUTION (NOT USED)**

END OF SECTIONNALLY

**SECTION 01200**  
**PROJECT MEETINGS**

**PART 1 - GENERAL**

1.01 REQUIREMENTS INCLUDED

- A. Contractor participation in pre-work conferences, and by exception progress meetings and specially called meetings.
- B. Progress meeting exception. Progress meetings will be held on a by-weekly frequency for work orders extending 4 calendar weeks or more. Specialty meetings will be held when work issues arise that are solved in the field or product demonstrations are provided.

1.02 MEETINGS CALLED BY THE CITY

- A. The City will schedule and administer a pre-work conference, and by exception progress meetings and specific topic meetings throughout the progress of the Work. The City will:
  - 1. Prepare and distribute a notification of the meeting to required attendees.
  - 2. Establish, prepare and distribute an agenda with the notification.
  - 3. Make physical arrangements for the meetings.
  - 4. Preside at meetings.
  - 5. Prepare and distribute minutes of meetings including significant proceedings and decisions, within 15 working days after each meeting. Minutes will be forwarded to all participants and to parties affected by decisions made at the meeting.
- B. Representatives of the Contractor, Subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. The pre-work meeting location will be held at the 4<sup>th</sup> floor of City Hall in the Public Works Conference Room and any progress or specialty meetings will be held at the City Field Operations Facilities. All contractor employees may obtain parking passes for the meeting at City Hall. The parking at the operations facilities is informal.

1.03 PRE-CONSTRUCTION CONFERENCE

- A. Attendance:
  - 1. City
  - 2. Contractor and superintendent
  - 3. Subcontractors as appropriate to the agenda
  - 4. Representatives of suppliers and manufacturers as appropriate to the agenda
  - 5. Other agency representatives (FDOT, SJC, etc.)
  - 6. Others as requested by the City or Contractor

- B. Draft Agenda:
  - 1. Will be distributed for review and input prior to the meeting.

#### 1.04 PROGRESS MEETINGS

- A. See pre-work meeting paragraph 1.03. The Contractor's representative is to attend meetings and have the authority to act on behalf of the entity represented on field related matters. Contractor's representative is to study previous meeting minutes and current agenda items, in order to be prepared to discuss pertinent topics and provide specific information on the agenda.
- B. Revision to Minutes:
  - 1. A draft of the meeting notes will be distributed to the attendees. A time frame will be provided for any suggested changes. Meeting notes will be issued at the end of this time period or when all changes or content is finalized.

#### **PART 2 - PRODUCTS (NOT USED)**

#### **PART 3 - EXECUTION (NOT USED)**

END OF SECTION

## SECTION 01300

### SUBMITTALS

#### PART 1 - GENERAL

Work completed without approved Shop Drawings and/or samples shall be considered installed at the Contractor's risk.

##### 1.01 SHOP DRAWINGS AND DATA

- A. Contractor's drawings, certifications, samples, proposed equipment, plans, data sheets and forms shall be clearly marked with specification title and numbers to identify pertinent materials. Delete information which is not applicable to the Work by striking or cross-hatching.
- B. If Shop Drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in the letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations, the Contractor shall not be relieved of the responsibility for executing the Work in accordance with the Contract, even though such Drawings have been reviewed.
- C. All submittals are to be in conformance with applicable standards or codes.
- D. Submittals may be provided electronically via portable hard drives, ftp web sites or similar.

##### 1.02 REVIEW OF SHOP DRAWINGS AND SAMPLES

- A. The City /Professional's review of submittals and samples as submitted by the Contractor will be to determine if the items(s) generally conform(s) to the information in the Contract Documents.
- B. The review of submittals will be general, and shall not be construed:
  - 1. As permitting any departure from the Contract Documents
  - 2. As relieving the Contractor of responsibility for any errors, including details, dimensions, and materials
  - 3. As approving departures from details furnished by the City/Professional, except as otherwise provided herein
- C. If the drawings or schedules as submitted describe variations and show a departure from the Contract Documents which the City/Professional finds to be in the interest of the City and to be so minor as not to involve a change in Contract Price or Contract Time, the City/Professional may return the reviewed drawings without noting an exception.

- D. "Approved As Noted": Contractor shall incorporate City/Professional's comments into the submittal before release to manufacturer. The Contractor shall send a letter to the City/Professional acknowledging the comments and their incorporation into the Shop Drawing.
- E. "Amend and Resubmit": Contractor shall resubmit the Shop Drawing to the City/Professional. The resubmittal shall incorporate the City/Professional's comments highlighted on the Shop Drawing.
- F. "Rejected": Contractor shall correct, revise and resubmit Shop Drawing for review by City/Professional.
- G. "Record Copy" will be accepted for record purposes only.
- H. Resubmittals will be handled in the same manner as first submittals. For resubmittals the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions other than the corrections requested by City/Professional on previous submissions. The Contractor shall make any corrections required by the City/Professional.
- I. When the Shop Drawings have been completed to the satisfaction of the City/Professional, the Contractor shall carry out the Construction in accordance therewith and shall make no further changes therein except upon written instructions from the City/Professional.

### 1.03 **PRODUCT DATA**

- A. Submit not less than 1 electronic or 2 -copies, unless approved by the City/Professional. Mark each copy to identify applicable products, models, options and other data. Supplement manufacturers' standard data to provide information unique to the Work.

### 1.04 **SAMPLES**

- A. Submit the number of samples specified in the respective Specification section, but no less than two (2). After review one (1) will be retained by the City. Reviewed samples that may be used in the Work are indicated in the Specification Section.
- B. Samples shall be of sufficient size to clearly illustrate:
  - 1. Each sample shall have a label indicating:
    - a. Name of Project
    - b. Name of Contractor and Subcontractor
    - c. Material or equipment represented
    - d. Place of origin
    - e. Location in Project
    - f. Specification title and number
    - g. Submittal number



## 1.05 DRAWINGS, PRODUCT DATA AND CERTIFICATES

- A. Each letter of transmittal shall identify each and every item transmitted by title, drawing number, revision number and date.
- B. The following is applicable to submitted videos, plans, drawings, and certificates:
  - 1. Each submittal shall identify applicable Standards.
- C. When resubmission is required, the City/Professional will return only one (1) marked up copies. A third submission from the same manufacturer will not be accepted.

## 1.06 SUBSTITUTIONS

- A. The substitution requirements of this Section are in addition to the requirements of the General Conditions.
- B. When a particular product is specified or called for, it is intended and shall be understood that the proposal tendered by the Bidder includes those products in his Bid. Substitutions will only be considered in cases where original materials are unavailable or in an instance where substitute can be proven superior in its planned application
- C. The intent of these specifications is to provide the City with a quality facility without discouraging competitive bidding. For products specified only by reference standards, performance and descriptive methods, without naming manufacturer's products, the Contractor may provide the products of any manufacturer complying with the Contract Documents, subject to the review of product data by the City/Professional as specified herein.
  - 1. Substitutions will be required to be suitable for the application and provide performance equal to or better than the listed or approved product. ▲
  - 2. Substituted products will also be required to come with an equivalent or better warranty than the listed or approved. ▲
- D. The City/Professional's approval is required for substitutions.
- E. The Contract is based on the materials, equipment and methods described in the Contract Documents.
- F. Do not substitute materials, equipment or methods unless such substitution has been specifically approved for this Work by the City/Professional in writing. The Contractor must provide a submittal per this Section specifically requesting approval of the substitution. Failure to specifically identify the requested substitution may invalidate approval of a submittal.

## 1.07 AVAILABILITY OF SPECIFIED ITEMS

- A. Verify prior to bidding that all specified items will be available in time for installation during Construction for orderly and timely progress of the Work.



- B. In the event that specified items will not be available, notify the City/Professional prior to receipt of proposals.

## **PART 2 - PRODUCTS (NOT USED)**

## **PART 3 - EXECUTION**

### **3.01 SUBMITTAL PROCEDURES**

- A. On resubmittals, direct specific attention in writing or on the revised Drawings or sample to revisions other than the corrections required by City on previous submissions.
- B. In the event that a resubmittal becomes necessary if it is time critical a tabletop review will be arranged to expedite the review.
- C. All drawings, schematics, manufacturer's product data, certifications and other drawing submittals required for a system specification shall be submitted at one time as a package to facilitate interface checking.
- D. All Shop Drawings shall be accompanied with a transmittal letter providing the following information:
  - 1. Project Title and Contract Number
  - 2. Date
  - 3. Contractor's name and address
  - 4. The number of each Shop Drawing, project data, and sample required
  - 5. Notification of Deviations from Contract Documents
  - 6. Submittal Log Number conforming to specification section numbers
    - a. Submit each specification section separately.
    - b. Identify each Shop Drawing item required under respective specification section.
    - c. Identify resubmittal using specification section followed by A (first resubmittal), B (second resubmittal) ...etc.

### **3.02 CITY'S / PROFESSIONAL'S REVIEW**

- A. Corrections or comments made on Submittals during review do not relieve the Contractor from compliance with the requirements of the Specifications and standards. This check is only for review of general conformance. Any substitutions or changes shall be properly noted.
- B. Review Time:
  - 1. On a normal basis, each submittal will be returned to the Contractor within 2 working days of the date it is received. CCTV videos will be an exception.
  - 2. If, for any reason, the above schedule cannot be met, the Contractor will be so informed within a reasonable period.

END OF SECTION

**SECTION 01516**  
**COLLECTION SYSTEM BYPASS**

**PART 1 - GENERAL**

**1.01 SCOPE OF WORK**

**A. SEWER BYPASSING AND DEWATERING**

1. Contractor shall provide all isolation and bypass operations: The Contractor's objective of flow bypass and/or diversion pumping is to maintain an efficient and uninterrupted level of service to wastewater collection system for users while inspections or rehabilitation operations are being performed on the manhole. The main segment(s) being bypassed and/or from which flow is being diverted by:
  - a. Ensuring that bypass and diversion pumps are adequately fueled, lubricated and maintained.
  - b. Ensuring backup spare parts are expeditiously applied to the flow bypass and/or diversion pumping system in the event of component breakdown.
  - c. Ensure an emergency backup plan is smoothly implemented in the event of system failure.
  - d. Preventing backup, spillage, flooding or overflow onto streets, yards and unpaved areas or into building, adjacent ditches, storm water mains and waterways while flow bypass or diversion pumping takes place.
  - e. Ensuring that installation, startup and subsequent disassembly of the flow bypass and diversion pumping system is smoothly transitioned.
2. Flow bypass and diversion pumping shall be done in such a manner so as not to damage private or public property or create a nuisance or public menace. The pumped sewage shall be in an enclosed hose or pipe that is adequately protected from traffic and shall be redirected into the wastewater collection system. After the work is completed, flow shall be returned to the sewer and all temporary equipment removed.
3. When pumps are operating, an experienced bypass/diversion pump maintenance operator/mechanic and/or deputy shall continuously be on site to monitor the operation of the entire bypass/diversion system. The operator/mechanic shall comprehensively, methodically and continuously:
  - a. Adjust pump speed as appropriate so as not to adversely impact upstream or downstream flow condition levels.

- b. Check that the effectiveness and security of bulkheads, dams, diaphragms, plugs, valves, weirs and all other flow control devices are working effectively and according to plan.
  - c. Check the integrity of hoses and couplings along the entire bypass/diversion system.
  - d. Monitor lubrication levels and top off as necessary.
  - e. Facilitate minor repairs as required.
  - f. Report to City on problems arising.
4. The Contractor shall be solely responsible for planning and executing sewer flow control, bypass and diversion pumping operations. The Contractor shall be entirely liable for damages to private or public property that may result from his/her operations and for all cleanup, disinfection, damages, and resultant fines in the event of spillage, flooding or overflow.
  5. In the event of accidental overflow or spillage, refer to section 02775 for information regarding an event.
  6. Once by-pass pumping is underway at any given site, work shall be completed as efficiently as possible without interruption.
  7. The level of noise emitted from pumps must be within regulations/ordinance parameters.

## 1.02 SUBMITTALS

- A. Prior to implementation of any bypass, the Contractor will submit and receive City acceptance of a bypass plan. The Contractor will submit to the County a comprehensive written plan for approval and acceptance that describes the intended bypass for the maintenance of flows during construction. The Contractor will also provide a sketch showing the location of bypass pumping equipment for each pump station or line segment(s) around which flows are being bypassed. The plan will include proposed tanker(s), pump(s), bypass piping, backup plan and equipment, work schedule, monitoring log for bypass pumping, monitoring plan of the bypass pumping operation, and maintenance of traffic plan.

## PART 2 - PRODUCTS

### 2.01 GENERAL

- A. The Contractor will provide and maintain adequate equipment, piping, tankers, and other necessary appurtenances in order to maintain continuous and reliable wastewater service in all wastewater lines as required for construction. The Contractor will have tankers,

backup pump(s), piping, and appurtenances ready to deploy immediately.

- B. All piping will be designed to withstand at least twice the maximum system pressure or a minimum of 50-psi, whichever is greater.
- C. When bypassing a pump station, one (1) back-up pump equal to the primary unit will be provided by the Contractor. Bypass pumps shall have a maximum rating of 55 decibels for sound attenuation.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL**

- A. The Contractor shall have all materials, equipment and labor necessary to complete the repair, replacement, or rehabilitation on the job site prior to isolating the gravity main segment, manhole, or pump station. The Contractor will demonstrate that the temporary bypass pumping system is in good working order and is sufficiently sized to successfully handle flows by performing a test run for a period of 24-hours prior to beginning the Work.

#### **3.02 TRAFFIC CONSIDERATIONS**

- A. The Contractor shall locate bypass pumping suction and discharge lines so as to not cause undue interference with the use of streets, private driveways, and alleys, to include the possible temporary trenching of piping at critical intersections. Additional traffic maintenance requirements are found in Section 01570 "Maintenance of Traffic".

#### **3.03 BYPASS OPERATION**

- A. The Contractor shall submit a bypass plan to the City and the bypass plan must be approved before the bypass is operational to perform the Work. Contractor shall maintain the wastewater system flow and no surcharging will be allowed to occur out of the system.
- B. Where Work requires the main or pump station to be taken out service after normal working hours and bypass pumping is being used; the Contractor shall be responsible for monitoring the bypass operation 24-hours per day, 7-days per week. Any electronic monitoring in lieu of on-site monitoring must be detailed in the comprehensive written bypass plan.
- C. The Contractor shall ensure that no damage will be caused to private property as a result of bypass pumping operations. The Contractor will complete the Work as quickly as possible and pass all tests and inspections before discontinuing bypassing operations and returning flow to the wastewater manhole, main, or pump station.
- D. During bypassing, no wastewater will be leaked, dumped, or spilled in or onto, any area outside of the existing wastewater system.

- E. The Contractor shall immediately notify the City should a sanitary sewer overflow (SSO) occur. The Contractor shall take the necessary action to wash down, clean up and disinfect the spillage area to the satisfaction of the City or other governmental agency.
- F. The Contractor shall cease bypass operations and return flows to the existing sewer when directed by the City. When bypass operations are complete, all bypass piping shall be drained into the wastewater system prior to disassembly.

### 3.04 CONTRACTOR LIABILITY

- A. The Contractor shall be responsible for all required pumping, equipment, piping, and appurtenances to accomplish the bypass and for any and all damage that results directly or indirectly from the bypass pumping equipment, piping and/or appurtenances. The Contractor shall also be liable for all City personnel labor and equipment costs, penalties and fines resulting from sanitary sewer overflows. It is the intent of these specifications to require the Contractor to establish adequate bypass pumping as required regardless of the flow condition.
- B. Refer to Section 02775, Wastewater Manhole Rehabilitation paragraph 1.12 for responsibility for Overflows and Spills.

END OF SECTION

**SECTION 01570**  
**MAINTENANCE OF TRAFFIC**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

This section includes identifying safety hazards and then furnishing all necessary labor, materials, tools, and equipment including, but not limited, to signs, barricades, traffic drums, cones, flashers, construction fencing, flag persons, variable message boards, uniformed police officers, warning devices, temporary pavement markings, temporary sidewalk, delineators, etc., to maintain vehicular and pedestrian traffic through and adjacent to the project area. These measures and actions shall be taken to safely maintain the accessibility of public and construction traffic by preventing potential construction hazards. All materials, work and incidental costs related to Maintenance of Traffic will be paid for at the contract lump sum price.

**1.02 REQUIREMENTS**

- A. The Traffic Control Plan shall conform to the following standards:
  - 1. Standard Specifications for Road and Bridge Construction, latest edition including all subsequent supplements issued by the Florida Department of Transportation, (FDOT).
  - 2. Manual on Uniform Traffic Control Devices for Streets and Highways by U.S. Department of Transportation, Federal Highway Administration.
  - 3. All references to the respective agencies in the above referenced standards shall be construed to also include the municipality as applicable for this Work.
- B. Sequence the Work in a manner that will minimize disruption of vehicular and pedestrian access through and around the construction area.
- C. Traffic planning and control for the maintenance and protection of pedestrian and vehicular traffic affected by the Contractor's Work includes, but is not limited to:
  - 1. Construction and maintenance of any necessary detour equipment and facilities.
  - 2. Providing necessary facilities for access to residences and businesses.
  - 3. Furnishing, installing, and maintenance of traffic control and safety devices (e.g. signage, barricades, barriers, message boards, etc.), and flag persons as appropriate during Construction.
  - 4. Control of water runoff, dust and any other special requirements for safe and expeditious movement of traffic.




- D. Planning, maintenance and control of traffic shall be provided at the Contractor's expense. The Contractor will bear all expense of maintaining the vehicle and pedestrian traffic throughout the work area.
- E. The Contractor will ensure all personnel involved in traffic control are and capable of communicating with the public. The Contractor may be required to hire off-duty uniformed police officers, in addition to flag persons, to direct and maintain traffic. Locations and conditions requiring such uniformed police officers shall be as directed by the City. The Contractor shall be required to utilize uniformed police officers for work within St. Johns County and FDOT maintained ROW, road closures affecting school traffic and during all night work involving a road closure or crossing on nonresidential roads. The City will arrange for police assistance on City Streets when needed.
- F. The Contractor will remove temporary equipment and facilities when no longer required, restore grounds to original, or to specified conditions.

### 1.03 SUBMITTALS


- A. Submit at Contractor's own expense a Traffic Control Plan for approval by the controlling roadway agency (FDOT, St. John's County Public Works or other local government) having jurisdiction over the road for approval.
  - 1. The Traffic Control Plan will detail procedures and protective measures proposed by the Contractor to provide for protection and control of traffic affected by the Work consistent with the following applicable standards:
    - a. Standard Specifications for Road and Bridge Construction, latest edition including all subsequent supplements issued by the Florida Department of Transportation, (FDOT Spcc.).
    - b. Manual of Traffic Control and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations, FDOT.
    - c. Right-of-Way Utilization Regulations, St. John's County, Florida, latest edition.
- B. All references to the respective agencies in the above referenced standards shall be construed to also include the municipality as applicable for this Work.
- C. The Traffic Control Plan will be developed by a person that is qualified, has experience with and has a current advanced MOT certification in accordance with Florida Statutes and Federal Regulations. The plan shall include proposed locations and time durations of the following, as applicable:
  - 1. Pedestrian and public vehicular traffic routing.
  - 2. Lane and sidewalk closures, other traffic blockage and lane restrictions and reductions anticipated to be caused by construction operations. Show and describe the proposed location, dates, hours and duration of closure, vehicular and pedestrian traffic routing and management, traffic control devices for implementing pedestrian and vehicular movement around the closures, and details of barricades.
  - 3. Location, type and method of shoring to provide lateral support to the side of an excavation or embankment parallel to an open travel-way.



4. Allowable on-street parking within the immediate vicinity of worksite.
  5. Access to buildings immediately adjacent to worksite.
  6. Driveways blocked by construction operations.
  7. Temporary traffic control devices, temporary pavement striping and marking of streets and sidewalks affected by construction
  8. Temporary commercial and industrial loading and unloading zones.
  9. Construction vehicle reroutes, travel times, staging locations, and number and size of vehicles involved.
- D. Obtain and submit prior to erection, or otherwise impacting traffic, all required permits from all authorities having jurisdiction, excluding City of St. Augustine Public Works, if applicable.
- E. A right-of-way use permit will be required for work on City Streets. The City will assist with the application of and will issue this permit at no cost to the Contractor. 

## **PART 2 - PRODUCTS**

### **2.01 MATERIALS AND EQUIPMENT**

- A. The Contractor shall furnish, erect, and maintain all necessary traffic control devices, including flag person, in accordance with the Manual of Uniform Traffic Control Devices for Streets and Highways published by the U.S. Department of Transportation, Federal Highway Administration.
1. FLAG PERSONS
- a. All flag persons used on this Project will adhere to the following requirements:
  - b. Any person acting as a flag person on this Project will have attended a training session taught by a Contractor's or subcontractors qualified trainer before the start date of this Contract. 
  - c. The Contractor's qualified trainer will have completed a "Flag person Train the Trainer Session" in the 5-years previous or before the start date of this Contract and will be on file as a qualified flag person trainer.
  - d. The flag person trainer's name and Qualification Number will be furnished by the Contractor at the Pre-Construction meeting. The Contractor will provide all flag persons with the Flag Person Handbook and will observe the rules and regulations contained therein. This handbook will be in the possession of all flag person while flagging on the Project.
  - e. Flag persons will not be assigned other duties while working as authorized flag persons.
  - f. Any person replacing flag person for break shall have the same training.

## **PART 3 - EXECUTION**

### **3.01 NOTIFICATIONS**



- A. The Contractor will notify individual owners, owner's agents, and tenants of buildings affected by the construction, with copies to the city, 72-hours in advance of any construction activities.
- B. The Contractor shall notify residents and pedestrians via variable message boards no later than 10 days prior to the closure of any road, lane or pedestrian thoroughfare.
- C. The Contractor shall notify Emergency Management Services agencies, St. Johns County EOC no less than 7 days prior to such closures or whenever roads are impassable.
- D. Implement closing of vehicle or pedestrian thoroughfare in accordance with the construction drawings and the approved Traffic Control Plan.
- E. The Contractor will immediately notify the City of any vehicular or pedestrian safety or efficiency problems incurred as a result of the construction of the Project.

### 3.02 GENERAL TRAFFIC CONTROL

- A. The Contractor will sequence and plan construction operations and will generally conduct Work in such a manner as not to unduly or unnecessarily restrict or impede normal traffic.
- B. Unless otherwise provided, all roads within the limits of the Work will be kept open to all traffic by the Contractor. The Contractor will keep the portion of the project being used by public traffic, whether it is through or local traffic, in such condition that traffic will be adequately accommodated.
- C. The Contractor will be responsible for installation and maintenance of all traffic control devices and requirements for the duration of the construction period. Necessary precautions for traffic control will include, but not be limited to, warning signs, signals, lighting devices, markings, barricades, canalizations, and hand signaling devices.
- D. The Contractor will provide and maintain in a safe condition temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages and farms.
- E. The Contractor will always provide emergency access to all residences and businesses. Residential and business access will always be restored and maintained outside of the Contractor's normal working hours.
- F. Traffic is to be maintained on one section of existing pavement, proposed pavement, or a combination thereof. Alternating one-way traffic may be utilized and limited to a maximum length of 500-feet during construction hours. Lane width for alternating one-way traffic will be kept to a minimum width of 10-feet, or as directed by the City.
- G. Travel lanes and pedestrian access will be kept reasonably smooth, dry, and in a suitable condition at all times.



- H. The Contractor will make provisions at all "open cut" street crossings to allow for free passage of vehicles and pedestrians, either by bridging or other temporary crossing structures. Such structures will be of adequate strength and proper construction and will be maintained by the Contractor in such a manner as not to constitute an undue traffic hazard.
- I. The Contractor will keep all signs in proper position, clean, and legible at all times. Care will be taken so that weeds, shrubbery, construction materials, equipment, and soil are not allowed to obscure any sign, light, or barricade. Signs that do not apply to construction conditions should be removed or adjusted so that the legend is not visible to approaching traffic.
- J. The City may determine the need for, and extent of, additional striping removal and restriping.
- K. Excavated material, spoil banks, construction materials, equipment and supplies will not be in such a manner as to obstruct traffic, as practicable. The Contractor will immediately remove from the site all demolition material, exercising such precaution as may be directed by the City. All material excavated shall be disposed of so as to minimize traffic and pedestrian inconvenience and to prevent damage to adjacent property.
- L. During any suspension, the Contractor will make passable and open to traffic such portions of the Project and/or temporarily roadways as directed by the City for accommodation of traffic during the anticipated period of suspension. Passable conditions will be maintained until issuance of an order for the resumption of construction operations. When Work is resumed, the Contractor will replace or renew any Work or materials lost or damaged because of such temporary use in every respect as though its prosecution had been continuous and without interferences.

END OF SECTION



**SECTION 02761**  
**CLEANING STORM AND SANITARY SEWER SYSTEMS**

**PART 1 - GENERAL**

**1.01 SCOPE OF WORK**

- A. The Work covered in this section consists of cleaning stormwater culverts, drains, and sanitary sewer mains prior to the internal television inspection(s) for new or existing storm and wastewater systems.
- B. Cleaning: The intent of cleaning is to remove debris that may be causing a reduction in flow capacity, potential culvert or drain backups, or that limits the ability to evaluate the structural condition of the pipe segment. On all cleaning the Contractor shall perform work to an acceptable level as necessary to perform a thorough television inspection of the culvert or drain. An acceptable level is defined as the removal of all debris throughout the pipe segment cleaned. If the pipe condition is such that cleaning may cause a potential collapse, then the pipe shall be televised without attempting to clean it pending approval by the City.
- C. Water for Cleaning: The City shall provide access to water via fire hydrants for cleaning and other work items requiring water. The Contractor will be responsible for obtaining a transient water meter and paying for water used during course of cleaning. Additional compensation will be scheduled for extending water for cleaning greater than 500 feet from the main section to be cleaned.
- D. Recovering of Equipment: The Contractor will be responsible for recovering any equipment that becomes lodged or lost in the pipeline. The Contractor will be responsible for all costs associated with required evacuation, restoration of roads and easements, and repairs to pipes and manholes as needed to restore the pipeline and appurtenances back to their original conditions.
- E. Maintenance of Traffic (MOT)  
Refer to General Requirements Section 01570, Maintenance of Traffic requirements.
- F. Existing Utilities: The Contractor must take the necessary precautions for the protection of any utility encountered on the project or the restoration of any utility damaged during the work.
  - 1. If an excavation is required, the Contractor shall notify, at least 48 hours before breaking ground, all public or private service corporations having wire, poles, pipes, conduit, manholes, or other structures that may be affected by this operation, including all structures which are affected and not shown on these plans. Owners of underground utilities, which are members of the state's one call service, can be notified by calling. Non-member underground utility Owners must be called directly.



2. All maintenance, repair, and replacement of existing utilities shall be in accordance with the rules and regulations of the various utility companies having jurisdiction.
3. All existing storm sewers, driveway drains, surface drainpipes and other property, removed or damaged during work to clean and inspect the sewers shall be repaired and reconnected by the Contractor as directed by the City at no additional cost to the City.

#### G. Request for Supplementary Information

1. It shall be the responsibility of the Contractor to make timely requests of the City for supplemental information, which should be furnished by the City under the terms of this contract, and as required in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved to avoid delay.
2. B. Each request shall be in writing and list the various items and the latest day by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after contract award and shall be as complete as possible at that time. The Contractor shall, if required, furnish promptly any assistance and information the City may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for all delays arising from failure to comply with this section.

#### H. Use of Premises

1. The Contractor shall not trespass upon or in any way disturb private property without first obtaining written permission from the property Owner and/or Owner or Prime Contractor as appropriate to do so. A copy of such written permission shall be furnished to the City prior to accessing the site.
2. It shall be the Contractor's responsibility to work equipment around poles, trees, or other obstructions and to do so at his own expense.
3. If the Contractor finds it necessary to obtain additional working area, it shall be the Contractor's responsibility for its acquisition.
4. The Contractor shall, at no additional expense, restore such property to the original condition in the sole and unfettered opinion of the property Owner. The Contractor must take photographs and/or videos of existing properties prior to disturbance of each property and make a copy available to the City.
5. All items within the street right-of-way or sewer easement shall be removed, or removed and replaced, or restored as directed by the City.
6. The Contractor shall ensure all employees have a badge or visible identification during any time that they on the project site or within private property. This identification must be worn so that it is readily recognized and readable to the public.

#### I. Protection of Trees



1. The Contractor shall avoid any unnecessary damage to trees. Branches which overhang the project limits, and which interfere with the operation of equipment shall be tied back to avoid damage, if possible. Where injury to branches is unavoidable, the branches shall be sawed off neatly at the trunk or main branch, and the cut area shall be protected with approved pruning spray immediately. The Contractor at no additional expense shall remove any trees damaged beyond saving and make restitution to the Owner (public or private).

#### J. Fencing

1. Any fences, including hedge and shrubs, that need to be removed to facilitate the work shall be replaced, in kind or with repairs satisfactory to the Owner, at the Contractor's expense. Replacement of fences, hedges, and shrubs shall be considered incidental to the contract and not measured for payment.

#### K. Restoration

1. All roadway berms and drainage ditches disturbed by the work shall be restored, reshaped, and graded to drain.
2. Pavement restoration, if necessary, shall conform to the City, County, or State standards and specifications depending upon who has jurisdiction for the street. Trench backfill and compaction shall be in conformance with the local street restoration jurisdiction.
3. The remediation of sunken trenches caused by activities conducted in this contract shall be the Contractor's responsibility. Sunken areas shall be backfilled and compacted to meet adjoining grades; the surface shall be re-seeded or resurfaced with asphalt or concrete matching the existing surfacing.
4. The Contractor shall restore unpaved areas by seeding and mulching. No direct payment will be made for seeding and mulching.
5. Driveways shall be restored in accordance with Owner's regulations, or the Owner's Specifications depending upon who has jurisdiction for the driveway.
6. All disturbed areas shall be restored as nearly as possible to their original condition.
7. All restoration shall be completed in strict accordance with the appropriate items of the standards, specifications or matching the pre-work conditions as directed by the Owner.
8. The cost of all restoration of streets, drives, walks; sod, etc. shall be incidental to the contract and not measured for payment.
9. Restoration shall be kept current with the project work. Failure to keep restoration of these items completed reasonably close shall result in a stop work notice and delay of payment until such restoration is completed to the satisfaction of the Owner.

#### L. Cleanup

1. The Contractor shall keep the work area in an uncluttered condition by the frequent removal of debris. The Contractor shall remove all debris and unused material and leave the area in a condition similar to the condition of the area before any work was performed.

#### M. Property Damage



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1. The Contractor shall immediately investigate any and all reports of sewage backing up into fixtures served by the sewer section that is being cleaned or televised.
2. The Contractor will be required to notify the City immediately if he causes any damage to private or public property caused by activities related to this contract. The Contractor shall make repairs and/or clean the property immediately in a timeframe that is acceptable to the Owner.

N. Access to Municipal Water Supplies

1. Will be defined by the City with each work order proposal request.

## 1.02 CLEANING EQUIPMENT

A. Hydraulically Propelled Equipment:

1. The equipment used shall be of a movable dam type and be constructed in such a way that a portion of the dam may be collapsed at any time during the cleaning operation to protect against flooding of the sewer. The movable dam shall be equal in diameter to the pipe being cleaned and shall provide a flexible scraper around the outer periphery for grease removal. Special precautions to prevent flooding of the sewers and public or private property shall always be taken. Storm/Sewer cleaning balls or other such equipment which cannot be collapsed instantly to provide an immediate unobstructed flow-way during emergency conditions will not be considered as acceptable cleaning equipment. The movable dam shall be of equal diameter as the pipe being cleaned and shall provide a flexible scraper around the outer periphery to ensure total removal of the grease of obstruction.

B. High-Velocity Jet (Hydro-Cleaning) Equipment:

1. All height velocity hydraulic sewer cleaning equipment shall be truck mounted. The equipment shall have a minimum of 500 feet of ¾ inch I.D. high pressure hose with a selection of two or more high velocity nozzles. The nozzles shall have a capacity of 30 GPM at a minimum working pressure of 1000 psi. The nozzles shall be capable of producing a scouring action of 15 to 45 degree in the direction of cleaning and perpendicular to the sewer axis in all size lines designated to be cleaned. Equipment shall also include a high velocity gun for washing and scouring manhole walls and floor. The gun capacity shall equal 3.5 to 27 GPM at between 200 and 800 psi. The gun shall be capable of producing flows from a fine spray to a long-distance solid stream. The equipment shall carry its own 1200-gallon (minimum) water tank capable of holding corrosive or caustic cleaning, sanitizing or degreasing chemicals if required by the City, auxiliary engines and pumps, and hydraulically driving hose reel. All controls shall be located so that the equipment can be operated underground.

C. Mechanically Powered Equipment:



1. Bucket machines shall be in pairs with each machine powered by a minimum of a 16-horsepower engine to ensure sufficient pulling power. Machines shall have an overload device. Machines with direct drive that could cause damage to the pipe will not be used. The belt clutch gear reduction shall be a combination of approximately 83 to 1 reduction in low speed and 55 to 1 in high speed. The power rodding machine shall be either a sectional or continuous rod type capable of holding a minimum of 750-feet of rod. The rod shall be specially heat-treated steel, designed for the purpose intended. The machine shall have a positive rod drive and product a 2,000-pound rod pull. To ensure safe operation, the machine shall be fully enclosed body and an automatic safety throw-out clutch or relief valve. The final pass shall be with a brush large enough to assure that the line has been cleaned sufficiently. This brush shall be mechanically driven, with the power mechanism properly sized. All electrical drops required by the Contractor shall be arranged by the Contractor.

D. Vacuum machines:

1. May be used for removal of materials from manholes when other cleaning equipment is used to dislodge and transport material to the access point.

E. Combination Cleaner:

1. For cleaning small and large diameter sewer, the Contractor may use a combination hydraulic high-volume water and solids separation system. Water volume of up to 250-gpm at or above 2,000-psi will move solids to the downstream manhole in high flow conditions. The separation system will dewater solids to 95 % (passing a paint filter test) and transfer them to a dump truck, if needed, for transport to a water reclamation facility, approved landfill, or other location specified by the County or designee. Wash water will be filtered to a point where it can be used in the pump for continuous cleaning. No bypassing of sewer flows will be necessary. The unit shall be capable of 24-hour operation and the unit shall not leave the manhole until a section is fully cleaned.

### **1.03 CAPTURE AND REMOVAL OF DEBRIS:**

- A. The Contractor shall furnish equipment, either specialized or stand in the industry, for the purpose of preventing debris from being washed past the manhole, inlet, or outfall downstream of the line segment being cleaned, and for removing the debris from the structure before any damage is caused to the system performance and or system equipment such as pump/lift stations, check valves, flow-ways, etc. The cost of all system downtime and repairs to restore operational status resulting from construction debris damage that in the City's opinion was reasonably preventable will be borne by the Contractor.

### **1.04 QUALIFICATIONS**





- A. Refer to General Requirements Section 01001 article 1.10.A.2 for minimum qualifications.

## **1.05 SHOP DRAWINGS AND SUBMITTALS**

- A. Submittals shall be submitted to the City for review and acceptance prior to cleaning.
  - 1. Schedule of work:
    - a. Work Schedule. This schedule shall outline the sequence in which the Contractor proposes to conduct his operations and shall be submitted to the City two weeks in advance of performing work and provide the City a reasonable opportunity to observed and inspect work. The Contractor shall use a time-scaled format listing each segment of sewer to be cleaned. The level of detail of activities shall provide clear, concise communication of the plan of work. At a minimum, activities showing initial mobilization, start-up, and cleaning.
    - b. Original and updated schedules must be provided to the City in writing. The software used for producing the schedules must have the capability to tailor the form and format of schedules, and accompanying reports, may be use of Microsoft excel, project with similar formats.
    - c. The City may require additional updates to the schedule as changes occur. These additional updates will be submitted to the City within 24 hours of the request. Changes to the schedule are subject to approval of the City.
    - d. Schedule is to be updated weekly
  - 2. Proposed cleaning equipment.
  - 3. SDS for chemical cleaning products to be used.
  - 4. Cleaning log in a format acceptable to the City for purposes of recording pertinent information relative to the storm water main and sanitary sewer main and structures being cleaned.
- B. Post Cleaning submittal.
  - 1. Cleaning log including any pertinent information observed during cleaning.

A daily log shall be maintained to record the location of the manholes and sewer lines, lengths of the lines cleaned, method of cleaning, line sizes, identify type of cleaning (light, medium, or heavy), and type of debris moved. Observations are to be recorded on a cleaning report form.

## **PART 2 - PRODUCTS – NOT USED**

## **PART 3 - EXECUTION**

### **3.01 GENERAL**

- A. The Contractor shall furnish and maintain, in good condition, all cleaning and equipment necessary for proper execution of the work.



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- B. Maintaining Flow: It will be the responsibility of the Contractor, throughout the tenure of this contract, to provide and maintain sufficient flow at all times to pass any flash of storm flow of drainage ditches and prevent any backwater flooding due to obstruction caused by cleaning equipment.
- C. Work notices are to be provided to property owners 48 hours prior to beginning work. A copy of the notices will also be provided to the City at the time they are provided to property owners.

### **3.02 SITE VISIT:**

- B. The Contractor shall be responsible for conducting a physical reconnaissance of the area to be cleaned in order to verify the location of known and/or accepted manholes or inlets.
- B. The Contractor shall utilize a magnetic locator to attempt to identify the location of buried manhole covers and notify the City representative so that City personnel can excavate and bring the manhole up to grade prior to cleaning. Under no circumstances shall the Contractor excavate buried manholes without prior authorization from the City.

### **3.03 QUALITY ASSURANCE:**

- A. Refer to Section 01001 article 1.10.A for Company quality assurance documentation requirement.



### **3.04 ISOLATION AND BYPASS OPERATIONS**

- A. Refer to Section 02762 article 3.04 for provisions regarding isolation and bypass.

### **3.05 CLEANING PRECAUTIONS**

- A. All necessary precautions shall be taken to protect the culvert or drain from damage during all cleaning and preparation operations. Precautions shall also be taken to ensure that no damage is caused to public or private property adjacent to or served by the drain or its branches. The Contractor shall pay for and restore, at no additional costs to the City, any damage caused to public or private property because of such cleaning and preparation operations.
- B. Satisfactory precautions shall be taken in the use of cleaning equipment. When hydraulically propelled cleaning tools (which depend upon water pressure to provide their cleaning force) or tools which retard the flow in the sewer line are used, precautions shall be taken to ensure that the water pressure created does not damage or cause flooding of public or private property being served by the sewer. No fire hydrant shall be obstructed in case of a fire in the area served by the hydrant. All requirements shall be met when accessing a fire hydrant including but not limited to meters, backflow preventers, and properly trained personnel. It shall be the Contractor's responsibility to meet all state and local requirements.



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### **3.06 HYDRAULIC CLEANING METHODOLOGY:**

- A. High Velocity Cleaning Methodology: High velocity hydro-cleaning shall consist of cleaning and flushing of the storm water main or sewer line by means of water pumped into the line at a high velocity. This shall be accomplished using approved equipment to deliver water to a self-propelled nozzle to do the necessary cleaning and flushing. As many passes as necessary shall be made to sufficiently clean the storm water main or sewer line.

### **3.07 MECHANICAL CLEANING METHODOLOGY:**

- A. Rodding: Cleaning shall be with a power-driven continuous steel rod of sufficient length and gauge with the proper cleaning heads or augers, so as to loosen all solids or other materials. It shall also provide a means to thread a cable for the power winch.
- B. Bucket Machine: Removal of all solids, materials and other debris shall be by means of a clam-shell type bucket and/or other appliance dragged through storm water main or sewer line with power winches of suitable size and horsepower.
- C. Supplemental Cleaning: After all material has been removed by mechanical cleaning, a minimum of one pass using hydraulic cleaning methods shall be performed to ensure complete removal of material from the walls of the pipe. Any damage to pipes will be repaired.

### **3.08 SPECIAL CLEANING REQUIREMENTS FOR CAST IRON PIPE:**

- A. After cleaning pipe of normal deposits such as sand and grease by methods above, the pipe shall be cleaned of tuberculation, including rust build-up and mineral deposits. For pipe diameters greater than 24-inch, the Contractor may choose any equipment necessary to remove the tuberculation, such as a "pig" or rodder; For pipe diameters less than or equal to 24-inch, all tuberculations shall be removed using either a high pressure water blaster capable of delivering a minimum 40 gallons per minute at a pressure of 10,000 psi, mechanically or hydraulically driven chain flail, grinding chain cutters or other suitable means of removal of tuberculation. However, no equipment shall be used which may damage the pipe, manholes, street, or downstream pump stations without arranging emergency provisions to repair or replace the main being cleaned.

### **3.09 CLEANING**

- A. If cleaning of an entire culvert, drain or main section cannot be successfully performed from one access point, the equipment shall be set up on the other a connecting access point and cleaning attempted again. If results of the cleaning are favorable, the Contractor will proceed with the TV inspection. All sludge, dirt, sand, rocks, and other solid or semisolid materials resulting from the cleaning operation shall be removed from the downstream manhole of the section being cleaned. The Contractor shall not be responsible for removing mortar or other material that is securely attached to the pipe walls or joints.



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- B. Materials shall be disposed of from the site at least once at the end of each workday. The Contractor will be responsible for the disposal of materials removed from the culvert or drain system. Refer to paragraph 3.05.D.5.1 of Section 02775 for disposal of debris removed from stormwater culverts and drains.
- C. The designated inlet or manhole structure sections shall be cleaned using hydraulically propelled, high-velocity jet, or mechanically powered equipment approved by the City. Cleaning shall consist of normal hydraulic jet cleaning to facilitate the internal CCTV inspection.
- D. Types of cleaning of sanitary and storm sewers:
  - 1. Light cleaning of sewers consists of a maximum of 1 pass of the jet nozzle. Light cleaning of laterals will consist of flushing water into a cleanout. Resulting in removal of  $\frac{1}{4}$  pipe diameter depth or less of sand and/or debris from a section of pipe. The removal of roots, barnacles/oysters and/or tuberculation would be considered a separate item.
  - 2. Medium cleaning of sewers consists of 2 to 4 passes of the jet nozzle. Medium cleaning of laterals will consist of 1 to 4 passes with a jet nozzle. Resulting in removal of greater than  $\frac{1}{4}$  and up to and including  $\frac{1}{2}$  pipe diameter depth of sand and/or debris from a section of pipe. The removal of roots and/or tuberculation would be considered a separate item.
  - 3. Heavy cleaning consists of 5 or more passes of the jet nozzle such as removing heavy grease, debris, and roots. Resulting in the removal of greater than  $\frac{1}{2}$  pipe diameter depth of sand and/or debris from a section of pipe. The removal of roots and/or tuberculation would be considered a separate item.
- E. Selection of the equipment used shall be based on the conditions of lines at the time the Work commences. The equipment and methods selected shall be satisfactory to the City. The equipment shall be capable of removing dirt, grease, rocks, sand, debris, other materials, and obstructions from the sewer lines, laterals, and manholes.
- F. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set up on the other manhole and cleaning again attempted. The intent of preparatory cleaning is to provide sufficient cleaning to ensure camera passage and the internal conditions of the pipeline can be fully assessed.
- G. If the City establishes that a section of the pipeline cannot be adequately cleaned due to broken, collapsed, or void areas, then the inspection will be attempted up to the obstruction.

### **3.10 ROOT REMOVAL**

- A. Roots shall be removed in the designated sections and manholes where root intrusion is a problem and where authorized by the City. Special attention should be used during the cleaning operation to remove roots from the joints. Any roots that could prevent the proper application of chemical sealants or could prevent the proper seating and application of cured-in-place liners shall be removed. Procedures may include the use of



mechanical equipment such as, rodding machines, bucket machines, winches using root cutters, porcupines, and equipment such as high-velocity jet cleaners. Chemical root treatment shall be used before or following the root removal operation, depending on the manufacturer's recommendation. The Contractor shall capture and remove all roots from the line.

### **3.11 MATERIAL REMOVAL AND DISPOSAL**

- A. All sludge, dirt, sand, rocks, grease, roots, and other solid or semisolid material resulting from the cleaning operation shall be removed at the downstream structure of the section being cleaned. Contractor shall provide appropriate screening to stop passing of materials into downstream culverts, drains and structures. All solid or semisolid materials dislodged during cleaning operations shall be removed from the culvert or drain by Contractor at the downstream access point of the culvert or drain section being cleaned. The passing of dislodged materials downstream of the segment being cleaned shall not be permitted. In such an event, as observed or detected by the City or any third party, Contractor shall be responsible for cleaning the affected downstream access points in their entirety, at no additional cost to the City.
- B. The Contractor shall be responsible for the disposal of all waste materials and shall transport waste materials to the City's Wastewater Treatment Plant for processing. City shall approve all waste material disposal schedules. The selected Contractor(s) shall be responsible for all waste material spills and clean-up in the loading, hauling and unloading of the Contractors equipment.
- C. The contractor shall be responsible for conforming to any and all requirements regarding hauling and disposal of waste form each work site in accordance with OSHA regulations and those that may be mandated by federal, state, or local governments. The contractor shall ensure that all waste material transporters possess all required federal, state and local regulations, including but without limitation, 40 CFR Part 263, "Standards Applicable to Transporters of Hazardous Waste" and Chapter 17-730, Part 3 Florida Administration Code, as may be amended from time to time.
- D. The Contractor shall keep his haul route and work area(s) neat, clean, and reasonably free of odor, and shall bear all responsibility for the cleanup of any spill.

### **3.12 ACCEPTANCE OF CLEANING OPERATION**

- A. Acceptance of sanitary sewer and storm water pipe and structure cleaning shall be made upon the successful completion of the television inspection and shall be to the satisfaction of the City. If television inspection shows the cleaning to be unsatisfactory, the Contractor shall be required to re-clean and re-inspect the sewer line at no additional cost until the cleaning is shown to be satisfactory.
- B. In addition, on all sanitary sewers which have sags or dips, to an extent that the television camera lens becomes submerged during the television inspection, the Contractor shall use a high pressure cleaner to draw the water out of the pipe, or other means, to allow the full



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circumferential view of the pipe and identification of pipe defects, cracks, holes, and location of service connections.

**PART 4 - METHOD OF MEASUREMENT AND PAYMENT CLARIFICATIONS:** 

4.01 Unit Pricing:

- A. Unit price line items C.44-51 cover the cost for light level of cleaning of storm drains. Line items C.52 and 53 unit costs will be added to these unit costs when medium or heavy levels of cleaning are required to the respective light cleaning item.
- B. Unit price line items C.63 – C.65 cover the cost of both light level of cleaning and CCTV of sanitary sewer gravity mains. Reference Section 02762, Televising Storm and Sanitary Sewer Systems for CCTV inspections.
- C. Unit price line item C.72 covers the cost for light level of cleaning of sanitary sewer gravity mains including proper water disposal. Line items C.73 and .74 unit costs will be added to the unit price of line item C.72 when medium or heavy levels of cleaning are required in a main segment
- D. Unit price line items C.85 and .87 costs for mobilization and per diem costs will be associated with work performed on line items C.44 – .51, C.52 – .60, C.63 - .65 and C.72.
- E. Unit price line item E.91 will be applied when root removal is required.

END OF SECTION



**SECTION 02762**  
**TELEVISIONING STORM AND SANITARY SEWER SYSTEMS**

**PART 1 - GENERAL**

**1.01 SCOPE OF WORK**

The Work covered within this Section is for the internal closed-circuit television (CCTV) inspection of stormwater culverts, drains and sanitary mains. The Contractor shall perform televising work as necessary to thoroughly document the condition of all the culverts and drains the study area. The stormwater culverts and drains shall be carefully inspected to determine alignment, grade variations, separated joints, location and extent of any deterioration, breaks, obstacles, obstructions, and debris.

The quality of all Work specified in this Section shall meet or exceed the requirements of the National Association of Sewer Service Companies (NASSCO) Recommended Specifications for Sewer Collection System Rehabilitation (latest edition), except as described in this Section. Applicable portions of this Section that inadvertently fall below those standards shall be corrected and maintained at the NASSCO standards as a minimum requirement, at no additional cost to the City.

Refer to General Work Requirements Sections 01001, Summary of Work 01010, Section 01516 Collection System Bypassing, and Section 01570, Maintenance of Traffic, and Section 02761, Cleaning Storm and Sanitary Sewer Systems for requirements related to CCTV inspections.

**1.02 REQUIREMENTS**

- A. The Contractor shall inspect the sewer interior using a color closed circuit television camera (CCTV) and document the inspection on a digital recorder. All inspection video shall be captured in either MPEG or Windows Media Video (.WMV) file format and saved portable hard drives for submittal. Each inspected culvert or drain, referenced structure to structure, inlet to inlet, and inlet or manhole to outfall shall be referenced to the property address and corresponding culvert or drain should have an associated MPEG or WMV file. Digital photographs (.JPG files), inspection reports (.PDF files) and any handwritten inspection logs or field maps shall accompany the video inspections for each sewer reach (manhole-to-manhole) or lateral inspected.
- B. Contractor shall provide inspection video, data and reports in accordance with the requirements specified herein. Contractor shall provide all video on portable hard drive as specified. All Work will conform to current NASSCO Pipeline Assessment Certification Program (PACP) coding conventions and all software used by the Contractor will be PACP compliant. An electronic database will be provided by the Contractor in a PACP exported format approved by the City.



- C. The Contractor shall provide comments as necessary to fully describe the existing condition of the sewer on the inspection forms.
- D. Contractor shall be responsible for modifications to equipment and/or inspection procedures to achieve report material of acceptable quality.
- E. No Work shall commence prior to approval of the submitted material by the City. Once accepted, the report material shall serve as a standard for the remaining Work.
- F. Site to be restored to pre-inspection conditions.
- G. Contractor shall ensure that employee's vehicles display company logo on side doors and company phone numbers. No personal vehicles are to park at the job site.

### 1.03 QUALIFICATIONS AND QUALITY

- A. Refer to Section 01001 paragraph 1.10.B for required certifications and licenses.

### 1.04 SUBMITTALS

Submittals shall be provided to the City for review and acceptance prior to construction as listed and described in the individual General Requirements and Technical Specification sections. Work performed for which a submittal or shop drawing is required that has not been reviewed by the City or responsible agencies shall be considered installed at the Contractor's risk.

- A. Submittals associated with this section submitted under another Section.
  - 1. Refer to Section 01516 for Generic by-pass pumping plan submittal.
  - 2. Refer to Section 02761 for SDS submittal.
  - 3. Work schedule refer to Section 02761, Cleaning Storm Sewer Systems, and article 1.05.A & B for requirements.
  - 4. Maintenance of Traffic is covered in General Requirements Section 01570.
  - 5. Previous Work Products: The Contractor shall submit one (1) example of previous closed-circuit televising (CCTV) inspections stormwater culverts and drains work for approval. The approved sample will establish the quality of deliverable to be expected on the project. The submitted example shall be the work of the field supervisor or foreman to be used on this Project.
  - 6. CCTV video sample, Section 01101.
- B. Submittals under this section.
  - 1. PACP certificate copies of all operators.
  - 2. Footage calibration report for each camera used.
  - 3. Work schedule refer to Section 02761, Cleaning Storm Sewer Systems, and article 1.05.A & B for requirements.
  - 4. Maintenance of Traffic is covered in General Requirements Section 01570.
- C. The following deliverables shall be submitted on a portable hard drive at the completion of





inspection:

1. Storm water main work inspection videos saved in MPEG format or Windows Media video format
  2. Electronic version (.pdf) of the pipe inspection reports
  3. PACP export pipe inspection database (.mdb)
  4. Inspection digital photographs in JPEG format
  5. Map of sub area depicting area inspected, inspection status, asset identification numbers and mark ups
  6. QA/QC report.
- D. The above deliverables shall be submitted monthly, or shorter frequency depending on the duration of the work order, to the City for approval. Application for payment shall be made after review and approval by the City.
- E. The sewer inspection video, report documents, and sewer inspection database shall be in accordance with NASSCO PACP and ITCP.

#### 1.05 NOTIFICATION

- A. Contractor shall notify the City a minimum of 4-work days prior to performing any inspection work. No payment will be made for inspections performed without proper notification.

### **PART 2 - PRODUCTS**

#### 2.01 EQUIPMENT

- A. Closed Circuit Television Camera: The television camera used for the inspection shall be one specifically designed and constructed for storm sewer inspection. Lighting for the camera shall be suitable to allow a clear picture of the entire periphery of the pipe. The camera shall be operative in 100 % humidity/submerged conditions. The CCTV camera equipment will provide a view of the pipe ahead of the equipment and of features to the side of the equipment through turning and rotation of the lens. The camera shall be capable of tilting at right angles along the axis of the pipe while panning the camera lens through a full circle about the circumference of the pipe. The lights on the camera shall also be capable of panning 90° (degrees) to the axis of the pipe.

The radial view camera must be solid-state color and have remote control of the rotational lens. The camera shall be capable of viewing the complete circumference of the pipe or culvert. Cameras incorporating mirrors for viewing sides or using exposed rotating heads are not acceptable. The camera lens shall be an auto-iris type with remote controlled manual override.

If the equipment proves to be unsatisfactory, it shall be replaced with adequate equipment. The camera unit shall have sufficient quantities of line and video cable to inspect 2 complete, consecutive sewer reaches with access approximately 750-feet apart.



The camera, television monitor, and other components of the video system shall be capable of producing picture quality to the satisfaction of the City. The television camera, electronic systems and monitor shall provide an image that meets the following specifications, or approved equal:

1. The gray scale shall show equal changes in brightness ranging from black to white with a minimum of five stages.
2. With the monitor control correctly adjusted, the 6-colors; Yellow, Cyan, Green, Magenta, Red, and Blue, plus black and white shall be clearly resolved with the primary colors in order of decreasing luminance. The gray scale shall appear in contrasting shades of gray with no color tint.
3. The picture shall show no convergence or divergence over the whole of the picture. The monitor shall be at least 13-inches diagonally across the picture tube.
4. The live picture on the CCTV monitor shall be capable of registering a minimum of 470 lines horizontal resolution and be a clear, stable image with no interference.
5. Lighting intensity shall be remote controlled and shall be adjusted to minimize reflective glare. Lighting and camera quality shall provide a clear in-focus picture of the entire inside periphery of the sewers and laterals for all conditions except submergence. Under ideal conditions (no fog in the sewer) the camera lighting shall allow a clear picture up to 5 pipe diameter lengths away for the entire periphery of the sewer. The lighting shall provide uniform light free from shadows or hot spots.
6. The camera light head shall include a high-intensity side viewing lighting system to allow illumination of internal sections of lateral sewer connections.
7. Camera focal distance shall be remotely adjustable through a range of 6-inches to infinity.
8. Picture quality and definition shall be to the satisfaction of the City.
9. The monitor and software shall also be able to capture and save screen images of typical sewer details and all defects. Screen images shall be embedded into the pipe inspection report document submitted with the inspection video.
10. The video camera shall be capable of displaying on screen data as specified in paragraph 3.08 herein.
11. Depth gage: The camera shall have a depth gage or approved method to measure deflection in the pipe and joint separation approved by the City. The camera shall have zoom capabilities to be able to view the entire depth of a 20-foot deep manhole from the bottom during inspection.
12. The camera lens shall be kept clear of condensation and debris during the CCTV inspection.
13. Camera equipment must have independent lab approval for use in Class 1, Group 0 Hazardous locations per NFPA.

#### B. Video Capture System

The video and audio recordings of the sewer inspections shall be made using digital video equipment. A video enhancer may be used in conjunction with, but not in lieu of, the required equipment. The digital recording equipment shall capture sewer inspection on hard drive, with each sewer reach inspection recorded as an individual movie file (.MPEG,



.MPG, or .WMV) or approved equal. The video files will be named in accordance with the City file naming convention contained in paragraph 3.11 herein.

1. The video file names will be referenced in the inspection database and in an inspection report generated in PDF format. The pipeline collection and real time video capture and data acquisition systems shall be provided.
2. The system shall use the most current PACP compliant application software and shall be fully object oriented or approved equal. It shall be capable of printing pipeline inspection reports with captured images of defects or other related significant visual information on a standard color printer.
3. The imaging capture system shall store digitized color picture images and be saved in digital format on a hard drive or approved equal. Also, this system shall have the capability to supply the City with inspection data reports for each line segment.
4. The Contractor shall have the ability to store the compressed video files in industry standard and approved City format and be transferable with the PACP compliant inspection database.
5. The Contractor's equipment shall have the ability to "Link". "Linking" is defined as storing the video time frame code with each observation or defect with the ability to navigate from/to any previously recorded observation or defect instantaneously.
6. The system shall be able to produce data reports to include, at a minimum, all observation points and pertinent data. All data reports shall match the defect severity codes in accordance with PACP naming conventions
7. The data-sorting program shall be capable of sorting all data stored using generic sort key and user defined sort fields.
8. Camera footage, date & manhole numbers shall be maintained in real time and shall be displayed on the video monitor as well as the video character generators illuminated footage display at the control console. All manhole references will be based on the Cities Facility ID number.
9. Digital video shall be defined as ISO-MPEG Level 1 (MPEG-1) coding having a resolution of 352 pixels (x) by 240 pixels (y) (minimum) and an encoded frame rate of 29.97 frames per second. The digital recording shall include both audio and video information that accurately reproduces the original picture and sound of the video inspection. The video portion of the digital recording shall be free of electrical interference and shall produce a clear and stable image. The audio portion shall be sufficiently free of background and electrical noise so as to produce an oral report that is clear and discernible.
10. Inspection software shall be PACP compliant versions of CUES Granite XP, WinCan, Flexidata, or approved equal.
11. The CCTV equipment/software shall be capable of producing digitized images of all sewer line defects, manhole defects, and sewer line service connections in .jpeg format. Contractor shall plan to take digital still images of each defect, construction features and service connection to clearly depict it. More images may be necessary depending upon the condition of the pipe.

## 2.02 REPORTING CAPABILITIES

- A. The CCTV system shall be capable of printing pipeline inspection reports with pipeline



schematics and captured images of defects and other related significant visual information. The system shall have the ability to display any combination of the following formats and features simultaneously.

The following information is mandatory for all inspections:

1. Inspection Information: Refers to the area of pipe to be inspected between 2 manholes or the address of the lateral to be inspected.
  - a. Project Name
  - b. Surveyed by (Operator/Surveyor's name)
  - c. Operator/Surveyor Certificate number
  - d. System Owner
  - e. Date
  - f. Drainage Area (tributary pump station number)
  - g. Time
  - h. Sheet number (report sheet number)
  - i. Street Name and Number
  - j. Locality (City of St. Augustine (COSA))
  - k. Additional Location Information (e.g. backyard, parking lot, etc)
  - l. Upstream Manhole or Structure Number (City standard Facility ID Number)
  - m. Upstream manhole or structure rim/grate to invert (depth)
  - n. Downstream Manhole or Structure Number (City standard Facility ID Number)
  - o. Downstream manhole or structure rim/grate to invert (depth)
  - p. Direction of inspection (Upstream or Downstream)
  - q. Type of Pipe
  - r. Pipe Height
  - s. Pipe Width
  - t. Pipe Shape
  - u. Pipe Material
  - v. Lining Material (for lined sewers)
  - w. Pipe Joint Length
  - x. Purpose of Inspection (Condition evaluation, new line, CIP R/R project, etc.)
  - y. Pre-Cleaning (jetter, heavy cleaning, no pre-cleaning)
  - z. Media Number (Video file name)
  - aa. Weather
  - bb. Additional information/Comments
2. Observation Data: Refers to the portion of pipe where an observation is discovered. Observations shall be noted by text descriptions and defect code number using PACP defects codes, still frame pictures and video clips captured and recorded. Each observation shall include the following:
  - a. Actual observation footage
  - b. Video reference
  - c. Location of defect; clock position
  - d. Code (Group/Descriptor/Modifier/Severity)
  - e. Whether it is a continuous defect
  - f. Whether the defect occurs at a joint
  - g. Severity level



- h. video counter location
  - i. Final footage
  - j. Video clip ID for each observation
  - k. Image reference (file name of photos)
  - l. Remarks (as appropriate or needed)
3. Formats: Standard and/or custom designed reports shall have the following formats available and shall be able to be produced in hard copy or viewed on the monitor.
- a. Site Observation: Displays detailed site observation reports in landscape or portrait views.
  - b. Directory Report: Displays a list of all the projects sorted by pump station number and manhole number.
  - c. Picture Reports: Displays site data and include full size single photos or half size double photos of discrepancies.
  - d. Pipe Run: Displays a graphical display of the site indicating footage, observations, and comments.
  - e. Project Data: Displays the project, client, and Contractor information.
  - f. Custom Sort: Creates user-defined reports of selected site, project, and observation data.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL**

- A. Work notices are to be provided to property owners 48 hours prior to beginning work. A copy of the notices will also be provided to the City at the time they are provided to property owners.
- B. Prior to inspection the Contractor shall obtain pipe and manhole or structure asset identification numbers from the City to be used during inspections. Inspections performed using identification numbers other than the City assigned numbers will be rejected.
- C. Inspection shall not commence until the sewer section to be televised has been completely cleaned in conformance with Specification Section 02761 "Cleaning Storm and Sanitary Sewer Systems."
- D. Inspection of newly installed sewers (not yet in service) shall not begin prior to completion of the following:
  - 1. Pipe air testing
  - 2. All manhole or structure work, including installation of inverts
- E. After the sewer cleaning operation is completed, the line sections shall be visually inspected internally by means of color closed-circuit television. The television inspection shall be performed one-line section at time.
- F. Refer to Section 01001 paragraph 1.10.B for qualifications.



- G. Contractor shall perform sewer-televising work within 24-hours of said sewer being cleaned. If said sewer is not televised within the required 24-hour time limit, the sewer shall be re-cleaned prior to televising at no additional expense to the City.
- H. The Contractor shall lower the camera into the start manhole and record the camera entry into the sewer, observing the manhole as the camera enters.
- I. Pipe or culvert dimension is to be physically measured at the beginning and end of inspections and documented in the CCTV video record.
- J. The depth of each manhole or structure shall be measured to the nearest 1/10th of a foot and documented on the inspection forms. Estimates of manhole depths will not be accepted.
- K. The CCTV camera shall be positioned as close to the spring line as possible while maintaining the required equipment stability.
- L. Wherever possible the inspections shall be performed in the upstream to downstream direction. All sewer segments shall be recorded in a logical order in the same direction they are cleaned and televised.
- M. In the event that access to some manholes is restricted, permission may be granted by the City to direct the camera through the sewer in an upstream direction, against the flow.
- N. When sewer conditions prevent forward movement of the camera, the camera shall be withdrawn, and Contractor shall televise the line from the opposite direction.
- O. The camera shall be directed through the sewer in a downstream direction, with the flow, at a uniform, slow rate. In no case will the video camera record while moving at a speed greater than 30-feet per minute. If, during the course of the Project, the inspection is rejected due to camera speeds exceeding 30-feet per minute, the inspection recordings shall be redone, at no additional cost to the City.
- P. If a new manhole or structure is discovered in the field that was not on current maps, a new manhole identification number will be assigned by City. The City shall assign the manhole the next number above the highest manhole number within the sub area. The data / video files shall then be re-named to include the new ID, and a new CCTV inspection shall be started from the new ID. Contractor shall consult with the City for assignment of new manhole or structure identification numbers. Contractor shall note in the inspection form comments that a new ID has been assigned as well as provide a marked-up map indicating the newly found manhole and assigned manhole ID.
- Q. Flow levels within existing sewers to be inspected shall not exceed 5% of the pipe diameter. If water levels prevent adequate televising of the sewer, then conducting the Work during low flow periods or other methods like plugging and bypass pumping shall be implemented.



- R. For inspection of new sewers (not yet in service), the Contractor shall introduce clean water into the upstream manhole and keep water flowing until flow is observed at the downstream manhole location.
- S. The survey unit shall be slowed, stopped, or backed up to perform detailed inspections of significant features. The camera shall be stopped at all defects, changes in material, water level, size, side connections, manholes, structures, junctions, or other unusual areas. When stopped at the defect or feature, the operator shall pan the camera to the area and along the circumference of the pipe. Recording shall document broken sections, root intrusion, misaligned joints and other defects for a minimum of 5 seconds.
- T. The camera unit shall be paused long enough at areas suspected of leaking to determine if a leak exists currently or if deposits have occurred.
- U. At the Contractor's discretion or direction of the City, the camera shall be stopped or backed up (when conditions allow) to view and analyze conditions that appear to be unusual or uncommon for a sound sewer. The lens and lighting shall be readjusted, if need be, in order to ensure a clear, distinct, and properly lighted feature.
- V. Video recordings shall include a continuous video display/readout of similar information, as described in paragraph 3.08 herein. A separate digital video file shall be made for each pipe reach inspected.
- W. Contractor shall coordinate with the City prior to commencement of Work to ensure inspection is accomplished in a manner acceptable to the City.
- X. If the video and/or audio recording is of poor quality, the City has the right to require a re-submittal of the affected sewer sections and no payment will be made until an acceptable video and audio recording is made, submitted to, and accepted by the County.
- Y. Measurement for location of defects and actual length of pipe shall be by means of a calibrated meter on the camera with a digital readout on the video monitor. This readout shall be included in the video recording. Marking on cable, or the like, which would require interpolation for depth of manhole, will not be allowed. Measurement will be accurate to 1-foot per 100-feet of inspected pipe.
- Z. The distance shall be measured between the exit of the start manhole and the entrance of the finish manhole for a true measurement of the length of the pipe segment, as required by PACP. It shall be recorded in standard units and the video display readout shall display units to one-tenth of a foot.
- AA. The Contractor inspection units shall be equipped with adequate back up equipment and spare parts so field repairs to equipment can be made and down time is minimized.
- BB. The Contractor shall be responsible for all traffic control measures required to perform the Work.



### 3.02 QUALITY ASSURANCE

- A. Refer to Section 01001 paragraph 1.10 for requirements to have documented QA/QC procedures.

### 3.03 PRE-CONSTRUCTION INSPECTION

#### A. Procedure

1. The pre-construction inspection shall be used to determine whether the line has been cleaned sufficiently; to confirm the location and nature of defects.
2. The camera shall be moved through the line in either direction at a moderate rate, stopping when necessary to permit documentation of the sewer's condition. In no case will the television camera be pulled at a speed greater than 30-feet per minute. Manual winches, power winches, TV cable, and power rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line. If, during the inspection operation, the television camera will not pass through the entire culvert or drain section, the Contractor shall set up his equipment so that the inspection can be performed from the opposite access point (reverse set-up).
3. When manually operated winches are used to pull the television camera through the line, telephones, radios or other suitable means of communication shall be set up between the entry and exit points of the section being inspected to insure good communication between members of the crew.
4. The importance of accurate distance measurements is emphasized. The location of defects shall be within  $\pm 1$  feet.
5. During the internal inspection the television camera shall be temporarily stopped at each defect along the line. The Contractor shall record the nature and location of the defect. Where defects are also active infiltration sources, the rate of infiltration in gallons per minute shall be estimated by the Contractor and recorded. The camera shall also be stopped at active service connections where flow is discharging. Flows from service connections that are determined to be infiltration/inflow shall also be recorded.

#### B. Documentation of Television Inspection

1. Television Inspection Logs: Printed location records shall be kept by the Contractor and will clearly show the location in relation to an adjacent manhole of each infiltration point observed during inspection. In addition, other points of significance such as locations of unusual conditions, roots, connecting sewers, broken pipe, presence of scale and corrosion, and other discernible features will be recorded, and a copy of such records will be supplied to the City. The Contractor shall record all visuals observations on a "Television Inspection Report" form.
2. Once recorded, the digital data shall be labeled and become the property of the City. The Contractor shall have all readings and necessary playback equipment readily accessible for review by the City during the Project.

### 3.04 SEWER BYPASSING AND DEWATERING





- A. Refer to General Requirement Section 01516, Collection System Bypass, article 1.01 Scope of Work for sewer bypass requirements.

### 3.05 LINEAR MEASUREMENT

The CCTV camera location footage counter shall be zeroed at the beginning of each inspection. The survey unit location entered on the footage counter at the start of the inspection shall allow for the distance from the accepted start of the length of the sewer to the initial point of observation of the camera (pre-set footage). In the case of resuming an inspection at an intermediate point within a sewer reach, the footage counter shall be set to start at the distance from the upstream manhole or structure to that point, as previously recorded by the counter. The Contractor shall ensure that the footage counter starts to register immediately when the survey unit starts to move.

Prior to commencing inspections, the Contractor shall demonstrate compliance with the linear measurement tolerance specified below:

- A. The equipment shall measure the location of the camera unit in 1-foot increments from the beginning (upstream end) of each continuous section. This footage location must be displayed on the CCTV monitor and recorded on the videotapes.
- B. The accuracy of the measured location shall be within + 0.5% of the actual length of the sewer-reach being surveyed, or 1-foot, whichever is greater.

### 3.06 MEASUREMENT OF SAGS

The CCTV camera shall be equipped with a measuring device capable of accurately measuring the depth of standing water up to 3-inches. The measuring device shall be mounted to the front of the unit and be capable of being read as the unit advances through the pipe.

### 3.07 CCTV MONITOR DISPLAY

The images displayed on the CCTV monitors will be a view of the pipe above the water surface as seen by the CCTV camera as the unit is conveyed through the sewer.

The camera lighting shall be fixed in intensity prior to commencing the survey and the white balance set to the color temperature emitted. In order to ensure color constancy, no variation in illumination shall take place during the survey.

The video equipment shall be checked using an approved test card with a color bar prior to commencing each day's survey. The camera shall be positioned centrally and parallel to the test card at a distance where the full test card just fills the monitor screen. The card shall be illuminated evenly and uniformly without any reflection.

### 3.08 DATA DISPLAYS



- A. The CCTV images shall include an initial data display that identifies the sewer reach being surveyed and a survey status display that provides continuously updated information on the location of the survey unit as the survey is being performed. These data displays shall be in alphanumeric form. The size and position of the data shall not interfere with the main subject of the monitor picture.
- B. The on-screen display should be white during inspections where the background behind the display is dark and, conversely, black where the background is light.
- C. At the beginning of each reach of sewer being inspected, the following information shall be electronically generated and displayed on the CCTV monitors as well as included in the audio track:
  - 1. Date of survey
  - 2. Inspection company name and inspector
  - 3. Street name or location
  - 4. Manhole/structure number to manhole/structure number (in order of inspection)
  - 5. Direction of survey (upstream or downstream)
  - 6. Time of start of survey
- D. During inspections, the following information shall be electronically generated, automatically updated, and displayed on the CCTV monitors:
  - 1. Survey unit location in the sewer line in feet and tenths of feet from adjusted zero
  - 2. Sewer diameter
  - 3. Upstream and downstream manholes reference numbers as per approved Drawings or City GIS.
  - 4. During Lateral inspections the video display shall contain the lateral location and the footage of the camera within the lateral.

### 3.09 MANHOLE OR STRUCTURE NUMBERING, INSPECTION FORMS AND DEFECT CODES

- A. The Contractor will be required to use the manhole or structure numbering as shown on sewer maps provided by the City when performing the inspections for this project. These numbers are based on the Facility ID the City maintains in their graphics database.
- B. Inspection forms, defect codes, inspection database and inspection protocols used for documentation of CCTV work shall be in accordance with the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP).

### 3.10 BOX CULVERT INSPECTIONS

- A. CCTV Camera will be employed to scan the inside top of the culvert. The camera will be on a propelled skid at a uniform rate. Video images of defects will be captured and referenced in an electronic log so that the defects location is known. These images will be used to evaluate the condition of the inside top of the structure.

- B. A CCTV Camera mounted to a motorized skid and deployed inside of the culvert to document debris in the structure. Vidco images of debris will be recorded documenting flow restrictions that existing in the culvert.

### 3.11 SANITARY AND STORM SEWER DYE TESTING

- A. Dye test tracing of sewers involves introducing a small quantity of liquid dye concentrate into suspect inflow sources followed with sufficient volume of water clean water to locate the source's discharge point. During each tracing, sanitary and storm sewers and curb inlets will be monitored the discharge of dyed test water.
- B. Each dye water flood report will identify the section of sanitary sewers piping tested, the location(s) where the storm water system piping was isolated and flooded, photographs of each setup and CCTV inspection results identifying the locations were dye water entered the sanitary sewer collection system.

### 3.12 WASTEWATER FLOW MONITORING

- A. Wastewater flow monitoring equipment rental and installation of a Trimble Company Telog Ru-35 wireless multi-channel recording telemetry unit equipped with a FloWav model PSA-35-AV A/V pressure level sensor and doppler level sensor. With a redundant Flow Wave "StingRay" RS-232 or RS-485 ultrasonic level sensor.
- B. Wastewater flow monitoring and maintenance.
  - 1. The telemetry equipment data tracking will be stored on an 'Enterprise' server on a daily basis so that the recorded flow monitoring data (level velocity & discharge volumes) stored on the server is easily accessible. This data will be evaluated to predict the associated groundwater infiltration and storm water inflow levels will also be provided.

### 3.13 RAINFALL MONITORING

- A. Installation and rental of a Texas Electronics Tipping Bucket Rain Gauge and a Trimble Company Telog RG-32A Remote Telemetry Unit (RTU).
- B. Rainfall Monitoring and Maintenance
  - 1. Digital rainfall data will be recorded as 15-minute intervals over a 24-hour period from each installation locations. Collected data will be used to establish rainfall magnitudes and durations.



### 3.14 DELIVERABLES

The Contractor will be required to submit the following deliverables at the completion of the post construction video inspection. The pre-construction video inspection deliverables shall be as defined in 3.02 of this specification.

A. Inspection Reports to include:

1. Inspection session header information (see required fields above)
2. Defect log report including photo captures from CCTV video
3. Schematic drawing of pipe showing defects
4. Format:
  - a. Adobe Acrobat PDF files: 1 report PDF per pipe
  - b. Sewer inspection report file name:

<From MH/Structure ID>\_<To MH/Structure ID>\_<Date (year\_mo\_day format)>.PDF

Example: 30060002\_30060001\_2018\_01\_16.pdf

B. Inspection video files on portable hard drive, typed labels shall be attached to the face of each hard drive. The typed index labels shall include the following information:

1. Content (CCTV)
2. Contractor name
3. Purpose of Survey
4. Reaches included (from Manhole/Structure Number ## to Manhole/Structure Number ##)
5. Date of survey
6. Contract Number / Delivery Order Number (if applicable)

C. Sewer video files shall be MPEG or Windows Media File named according to the following standard:

<Upstream MH/Structure ID>\_<Downstream MH/Structure ID>-<Inspection>\_<Date (year month day)>.wmv

Example: 39540008-39540007\_20090805.wmv

In instances where a reverse set up is necessary to perform or complete the inspection the file name shall incorporate a "R" at the end of the file name to indicate "reverse" direction. Using the file example above, if the inspection from the upstream end was halted due to an obstruction and the pipe was televised from the opposite end, the video file from the downstream to upstream direction would be assigned the following file name:

Example:39540008-39540007\_20090805\_R.wmv

D. Electronic Inspection Data stored and exported in a NASSCO Pipeline Assessment and Certification Program (PACP) compliant Microsoft Access database (.MDB) version 4.4 or newer delivered on portable hard drive.




- E. Inspection photograph digital files (jpeg) indexed to NASSCO PACP compliant database.
- F. Map of sub area depicting area inspected, inspection status, asset identification numbers and mark ups,
- G. Acceptable media for the video recordings portable hard drive.
- H. Inspection data noted above shall be provided to the City weekly throughout the inspection work.
- I. Contractor Quality Control report detailing data validation performed, pipe inspection records reviewed and results.
- J. All inspection data shall be submitted on a portable hard drive. Each hard drive shall be filled with as much data as practical to minimize the number of hard drives submitted. Sections of a single segment of sewer shall not be recorded to more than 1 hard drive. Video footage of recorded segments shall be grouped by area and shall be submitted in sequential order relating to the area mapping designation.
- K. Upon approval by the City of all, or portions of, the data delivered via the portable hard drives, the approved CCTV data shall be delivered to the City on a portable hard drive labeled with project information. The hard drive shall clearly indicate the date of the inspection, the designated segment(s) of sewer mains(s) contained on the disk, the name of the project, the project Contract and Work Order number, and Contractor name. The hard drive shall contain separate digital files for each manhole-to-manhole section.
- L. The database shall be comprehensive for the entire project, and additional data shall be added to the database each week.

### 3.15 ACCEPTANCE

- A. Inspection deliverables will be validated to check conformance with the specified requirements for file names, formats, quantity, and resolution, data table references, in addition to checks for null fields, asset numbers, duplicate records, connectivity, material, size, and depth. Any data not passing the data validation checks will be returned to the Contractor for resubmittal.
- B. Inspection submittals will be reviewed for quality control. A minimum of 5% of the submitted inspections will be randomly reviewed. A quality control check will be performed for each CCTV operator and each operator must exceed 90% accuracy.
- C. Throughout the duration of the project, should the City discover inaccuracies in data or quality issues with any of the videos, Contractor shall re-inspect those segments at no additional cost to the City. The City will provide comments regarding acceptance of the data within 21-days of receiving the data from the Contractor. Neither the CCTV inspections nor the WORK inspected is accepted by the City until such time that an acceptance letter is issued by the City.




**PART 4 - METHOD OF MEASUREMENT AND PAYMENT CLARIFICATIONS:** 

4.01 Unit Pricing:

- A. Unit price line items C54 – C60 includes all work required for close circuit televising and documentation requirements of storm drains/culverts described in this Section.
- B. Unit price line items C63 - C65 includes all work required for light cleaning and close circuit televising and documentation requirements of sanitary sewers. Refer to Section 02761 for requirements on light cleaning.
- C. Unit price line item C61 and 62 includes all work to inspect and document existing conditions for Box Culverts.
- D. Unit price line item C66 includes all work to trace suspected inflow sources. Each will be per defect location on private property to verify inflow source on the property owner's side of the service. Each test is intended to verify if a cross connection is present.
- E. Unit price line item C67 includes all work involved with flooding stormwater system piping, CCTV inspection of sanitary gravity sewers dye water infiltration with photographic records of each test setup. Each suspected cross connection that is identified during smoke testing by others will define the location where flooding will be performed.
- F. Unit price line item C68 includes all work associated with procurement and installation of wastewater flow monitoring and telemetry equipment.
- G. Unit price line item C69 includes maintaining of the equipment installed under line item C68 and documenting results with evaluations of recorded flow conditions and predicting stormwater inflow and infiltrations.
- H. Unit Price line items C70 includes all work associated with procurement and installation of rainfall monitoring and telemetry equipment for each installation location.
- I. Unit Price line item C71 includes maintaining equipment installed under line item C70 and documenting and analyzing recorded data.

END OF SECTION



**SECTION 02764**  
**TELEVISIONING EXISTING MANHOLES, WET WELLS, AND STORMWATER**  
**STRUCTURES** 

**PART 1 - GENERAL**

**1.01 SCOPE OF WORK**

- A. The Contractor shall perform visual inspections of the existing manholes and structures and record any defect discovered. The visual inspection shall include surface photo, manhole cover and frame, chimney, walls, invert, and all appurtenances
- B. The nature of the inspections shall be to verify the physical condition of the manhole and to provide a permanent record of the existing condition as it relates to dimensions, materials, obstructions, breakage, connections, and deterioration. Inspections may be performed by personnel entry or from the surface utilizing pole mounted camera equipment to visually inspect the chimney, cone, wall, bench, pipe seals and invert conditions, and conditions of connecting pipes.
- C. Upon completion of inspections a recommendation shall be submitted listing any rehabilitations, if any, for the respective manhole.

**1.02 REQUIREMENTS**

- A. The Contractor shall inspect the manhole surroundings and the manhole interior using visual means and a digital camera for documentation.
- B. All inspections shall be recorded on standard manhole forms acceptable to the City.
- C. All inspection forms shall be scanned and submitted as .PDF files.
- D. All inspection data shall be entered into a NASSCO Manhole Assessment Certification Program (MACP) compliant database. The database shall be submitted along with the scanned .PDF files and all digital photographs in .JPG format.
- E. The inspection photographs, report documents, and inspection database shall be in accordance with NASSCO MACP.
- F. Contractor shall maintain a copy of all report materials. The Contractor shall provide comments as necessary to fully describe the existing condition of the manhole on the inspection forms.
- G. Contractor shall be responsible for modifications to equipment and/or inspection procedures to achieve report requirements.


### 1.03 QUALITY ASSURANCE

- A. Refer to Section 01001 paragraph 1.10.C for certifications and qualifications required for work performed under this Section.

### 1.04 SHOP DRAWINGS AND SUBMITTALS

- A. Submittals shall be provided to the City for review and acceptance. Prior to rehabilitation in accordance with the submittals shall be in accordance with specifications Section 01300.
- B. The following deliverables shall be submitted at the completion of inspection:
  - 1. Electronic version (.pdf) of the manhole inspection reports
  - 2. Populated NASSCO MACP Standard manhole inspection database (.mdb or Excel) saved on portable hard drives.
  - 3. Inspection digital photographs in JPEG format saved on portable hard drives.
  - 4. Recommended rehabilitations for each manhole inspected.
  - 5. QA/QC report
- C. The above deliverables shall be submitted to the City for approval.
- D. The manhole inspection reports, and database shall be in accordance with NASSCO MACP standards.

### 1.05 NOTIFICATION

- A. The Contractor shall notify the City a minimum of 48-hours prior to performing any inspection work. The City may be present during part or all of the inspections. No payment will be made for inspections performed without proper schedule notification.
- B. The Contractor shall distribute notices, door hangers, 72-hours in advance, to all residents and businesses in the area where inspections are schedule. The areas need to encompass at a minimum a two-block radius of the inspection location. If the location has restricted access, one road in and out all property owners along the access are to receive notices. The Contractor is to notify the City if they are not able, due to a lack of access, to the front door of the house or building in the area where notices are to be distributed. Such notices will not be required during the inspection phase of manhole rehabilitations unless there is restricted access to residences or businesses, 

## PART 2 - PRODUCTS

### 2.01 DIGITAL CAMERA FOR REMOTE INSPECTIONS



- A. All manhole photographs required as part of this specification shall be obtained using a minimum 4-megapixel digital camera with strobe flash capable of producing digital images with minimum resolution of 2240 x 1680.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL**

- A. The inspection crew shall mobilize to the site of the manhole inspection and immediately establish traffic control measures per Florida Department of Transportation (FDOT) requirements as well as any measures required to protect pedestrians. The crew shall inspect each manhole and record required information.
- B. All manhole and structures shall be located. Metal detectors shall be used to locate buried manholes. Once a buried manhole has been located, it shall be marked with paint and/or flagging, if necessary. All pertinent information available shall be recorded including area photo, address, etc. Contractor shall notify the City weekly with a list of those manholes that could not be fully inspected due to access issues. The City may arrange to have some, or all these manholes exposed, or otherwise made accessible for full inspection. The City will notify Contractor of the status and may authorize re-inspection.

#### **3.02 MANDATORY INSPECTION HEADER INFORMATION**

- A. The following mandatory information shall be recorded on the inspection form (template is located in the forms section). Note that the mandatory fields noted below are more inclusive than the MACP requirements. All available information shall be collected and recorded for those manholes and structures that are buried, could not open, surcharged, etc.
  1. Manhole or Structure Number (City standard Asset Number)
  2. Sheet number
  3. Work Order No.
  4. Date
  5. Time
  6. Surveyor's Name
  7. Certification Number
  8. System owner
  9. Locality (St. Augustine, Fl.)
  10. Drainage area (tributary Pump Station Number)
  11. Location (street number and name)
  12. Rim or grate to invert (nearest 0.1 foot)
  13. Pre-cleaning method (using approved MACP codes)
  14. Location code (using approved MACP codes)
  15. Manhole or structure surface type (using approved MACP codes)
  16. Potential for runoff (using approved MACP codes)



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17. Access point type (using approved MACP codes)
18. Inspection status (using approved MACP codes)
19. using street name an address reference)
20. Internal photo image reference (using standard manhole component descriptions)

### 3.03 MANHOLE OR STRUCTURE COMPONENT OBSERVATIONS

- A. The inspection crew shall complete all fields within the manhole component/observation section of the inspection form. The following information shall be collected:
  1. Cover type (solid, vented, bolted)
  2. Cover size (top surface diameter in inches)
  3. Cover material
  4. Number of vent holes
  5. Cover/Frame fit (cover to frame fit, MACP codes)
  6. Cover condition (MACP codes)
  7. Cover insert type
  8. Cover insert condition
  9. Frame condition
  10. Frame seal condition
  11. Frame offset distance
  12. Frame seal inflow
  13. Wall material
  14. Interior wall coating
  15. Wall diameter
  16. Pipe diameters
  17. Pipe materials type
  18. Bench present
  19. Channel installed
  20. Additional remarks relevant to the manhole or structure

### 3.04 MANHOLE OR STRUCTURE INTERIOR INSPECTION

- A. The inspection crew shall determine the types of defects within the manhole, document each defect on the manhole form and take a photograph of each defect. The manhole chimney, cone, wall, bench, and channel shall be inspected for structural integrity, signs of I/I and the presence of roots. All documentation shall follow NASSCO MACP standards. Each defect will be documented on the inspection form with the following information:
  1. Defect number
  2. Component of manhole containing defect
  3. Defect code (using approved MACP codes)
  4. Image Reference (using City approved file naming structure)

### 3.05 CONNECTING PIPE DETAILS

- A. Each pipe entering and exiting the manhole shall be photographed where possible and inspected to determine diameter, pipe material, debris levels, and rim to invert distance (to 0.1-feet). The pipe inspection will include the following information:
  - 1. Pipe photo (using City main segment numbering)
  - 2. Pipe direction (incoming or outgoing)
  - 3. Pipe clock positions (6:00 position = outgoing)
  - 4. Pipe diameter
  - 5. Pipe material (using PACP codes)
  - 6. Rim to invert distance (measured to nearest 1/10th of a foot)
  - 7. Pipe special condition (drops, force mains, etc. using approved MACP codes)
  - 8. Debris depth
  - 9. Connecting structure number; if manhole or cleanout, service line clock position, stubout clock position, etc.
  - 10. Pipe seal condition (using approved MACP codes)
  - 11. Pipe seal roots (using approved MACP codes)
  - 12. Observed pipe defects, obstructions, roots, etc. (using PACP codes)

### 3.06 MANHOLE OR STRUCTURE SKETCH, MAP UPDATE, AND NOTES

- A. The inspection crew shall complete the manhole plan view sketch noting all connecting pipes. Any special observations or notes may be added to the profile sketch on the field form.
- B. Influent and effluent lines in each manhole shall be compared to the existing map and corrections noted in the sketch section of the field form.

### 3.07 NOTIFICATION OF EMERGENCY CONDITIONS

- A. Inspection crews shall immediately notify the City and/or on-site inspector of any defects posing imminent danger to the public (missing lids, covers broken during inspection, sink holes, etc.) and any observed pipe blockages or potential overflow conditions.

### 3.08 COMPLETION

- A. Once the inspection is complete the field crew shall make certain the ring is clean and does not have any debris preventing a proper cover fit. The manhole lid shall be replaced, and any displaced items moved back into place.
- B. A list of manholes and/or structures that could not be fully inspected, along with the problem explanation, shall be forwarded to the City weekly throughout the inspection work.
- C. If the Contractor has completed accessible inspections, and the City authorizes, then Contractor may be required to re-mobilize at the same unit price and complete the

requested inspections. All re-inspections will be at the same contracted unit price.

- D. Any map updates shall be consolidated and forwarded to the City with the submitted inspections.

### 3.09 PHOTOGRAPH REQUIREMENTS

- A. During each inspection the following series of photographs shall be taken:
  - 1. Area Photograph: During the inspection, a photograph shall be taken of the manhole cover showing location within the roadway, shoulder, or easement as appropriate. Photographs shall be taken of any indications of previous overflows such as watermarks and paper or other debris typical of sewer overflows. Surface photographs shall be oriented in the direction of the outgoing pipe to show the pipeline cover and easement condition. The area photographs should show the manhole visible in the foreground where possible. A minimum of 1 area photo is required.
  - 2. Internal Photograph: Take a photograph of the manhole or structure interior in plan view showing the general arrangement of the incoming and outgoing sewers, manhole walls, and other appurtenances. The internal condition photograph shall be oriented with the direction of the outgoing main line flow at the bottom of the photograph (6:00 position). A minimum of 1 internal photograph is required.
  - 3. Manhole or Structure Defect Photographs: During manhole inspections digital photographs shall be taken of all defects. Photographs must clearly and accurately show each defect and correspond to defects and photo numbers logged on the manhole inspection form. A minimum of 1 photo for each observed defect is required.
  - 4. Connecting Pipe Photographs: The camera should then be pointed into all incoming and outgoing pipes where possible to capture general conditions within the pipes. Any obvious blockages or defects should be noted using PACP defect codes. A minimum of 1 photo of each incoming or outgoing pipe is required.
- B. During inspections manholes or structures shall be free of steam, fog, water vapor, or other conditions that will impact the quality of photographs.
- C. All photographs shall adequately capture the manhole conditions and details of defects. Lighting and camera quality shall provide a clear, in-focus picture of the manhole/structure interior, manhole/structure defects, and manhole/structure. The lighting shall provide uniform light free from shadows or hot spots.
- D. If larger than 2240 x 1680 resolution, then photo will be converted to 2240 x 1680. Photos less than 2240 x 1680 are not acceptable and converting upward to 2240 x 1680 is not acceptable. All photographs shall be resized to 2240 x 1680 resolution to minimize file size.
- E. The images shall be kept electronically, copied to an external hard drive, and submitted with the inspection forms per paragraph 3.12. Photographs shall be named according to

the photograph naming conventions included herein.

- F. All digital photographs shall be referenced on the manhole inspection form and electronic spreadsheet/database.
- G. All digital photographs shall be renamed in accordance with the following photo file naming convention: ▲
  1. Area Photo = Manhole/Structure ID, A, Photo Number, jpg  
Example: 3965002A0001.jpg  
Manhole/Structure: 39650002  
A=Area Photo  
Photo No.0001
  2. Internal Photo = Manhole/Structure ID, I, Photo Number, jpg  
Example: 3965002I0001.jpg  
Manhole/Structure: 3965002  
I=Internal Photo  
Photo No.0001  
(Note: Photo oriented with the outgoing pipe on the bottom)
  3. Manhole Defect Photo = Manhole/Structure ID, M, Photo Number, jpg  
Example: 3965002M0015  
Manhole/Structure: 3965002  
M=Manhole Defect Photo  
S=Structure Defect Photo  
Photo No. 0015
  4. Pipe Photo = Manhole/Structure ID, P, Photo Number, jpg  
Example: 3965002P0002.jpg  
Manhole/Structure: 3965002  
P=Pipe Photo  
Photo No. 0002

### 3.10 MANHOLE/STRUCTURE NUMBERING, INSPECTION FORMS AND DEFECT CODES

- A. The Contractor shall use the City manhole/structure numbering system when performing the inspections for this Project. Manhole/structure numbers will be provided by the City.
- B. Defect codes shall conform to those specified in the NASSCO MACP specification.

### 3.11 SITE RESTORATION

After inspecting manholes in an area, the work site shall be cleaned and restored to pre-Work conditions. If manhole is buried and exposed, then restore site by placing material back over exposed manhole. No re-sodding is anticipated or included in the pricing.

### 3.12 DELIVERABLES

The Contractor will be required to submit the following deliverables at the completion of inspection.

A. Scanned Field Inspection Reports to include:

1. Inspection session header information (see required fields above)
2. Component observations
3. Manhole/Structure inspection details including defects observed and photo image references
4. Connecting pipe details
5. Manhole/Structure plan view sketch
6. Manhole/Structure rehabilitation recommendation for each manhole.
7. Format:
  - a. Adobe Acrobat PDF files: 1 report PDF per manhole or Structure
  - b. File name: <MH ID> <Date (year\_mo\_day format)>.PDF

Example: 30060002\_2010\_02\_16.pdf

B. Inspection digital photographs file name, format, and resolution shall meet requirements of paragraph 3.08 and stored and submitted on a portable hard drive.

C. Electronic Inspection Data stored and exported in City approved NASSCO Manhole Assessment and Certification Program (MACP) compliant Microsoft Access database (.MDB) version 4.4, or Excel file delivered on portable hard drive.

D. Marked up field maps detailing map corrections and/or discrepancies noted during inspection.


All digital files shall be submitted on portable hard drive.

END OF SECTION


## SECTION 02775

### WASTEWATER MANHOLE, LIFT STATION WET WELL AND STORMWATER STRUCTURES REHABILITATION

#### PART 1 - GENERAL


1.01 Manholes, Lift Stations Wet Wells and Stormwater Structures in the City of St. Augustine are in varying conditions of deterioration. Therefore, procedures for rehabilitation demand selection of best industry practices to restore these assets and avoid unnecessary replacements. Therefore, selection of rehabilitation requirements needs to be based on each structures condition. 

#### 1.02 QUALIFICATIONS

A. Refer to Section 01001 paragraph 1.10.D for applicator qualifications. 

#### 1.03 SCOPE OF WORK

A. Manhole inspections shall be in accordance with NASSCO Manhole Assessment Certification Program (MACP), both level 1 and 2.

1. Detailed inspections will include digital photographs of the interior. These photographs will be made documenting the entire perimeter of each manhole, wet well or stormwater structure. Digital photos are taken of each defect found inside of the manhole or structure during the inspection. 

B. Manhole and Structures inspections is a condition precedent to establishing required rehabilitations.

C. The City will review rehabilitation recommendations that are included in the submitted inspection reports.

D. The City will define approved rehabilitations in each proposal request.

E. All rehabilitation proposals shall include a schedule, statement of compliance with this specification, a work plan with proposed product and system submittals.

F. Submittals shall be made in accordance with Section 01300

G. This specification covers all work necessary for sanitary manhole, lift station wet well and stormwater structure rehabilitations. The Contractor shall provide all labor, materials and equipment necessary for rehabilitation of these structures.

H. After rehabilitation manholes and wet wells shall sealed from inflow and infiltration, be corrosion resistant, and structurally sound.

I. The repair and sealing of the manhole base, bench, invert, walls, corbel/cone, and chimney of brick, block, or precast manholes, includes the removal and proper disposal of any unsound material.

J. After rehabilitation Stormwater structures shall be structurally sound and be protected from corrosion.

K. Installation of manhole external and internal infiltration barriers.

L. Removal and replacement of manhole frames and covers.



- M. Horizontal and/or vertical adjustment of and securing misaligned manhole frames and covers to grade.
- N. Installation of manhole cover seals and inflow dishes at City designated locations.
- O. The inspection and testing of the various types of work to ensure compliance.
- P. Related work specified in other Sections.
  - 1. Section 01001 "General Work Requirements"
  - 2. Section 01010 "Summary of Work"
  - 3. Section 01200 "Project Meetings"
  - 4. Section 01300 "Submittals"
  - 5. Section 01516 "Collection System Bypass"
  - 6. Section 01570 "Maintenance of Traffic"
  - 7. Section 02764 "Televising Existing Manholes"
- Q. All work shall adhere to Occupational Health and Safety Administration (OSHA) standards, current edition. All entries into or work within confined spaces shall be performed in accordance with OSHA Standard Title 29 Code of Federal Regulations (CFR) 1910.146 permit required confined spaces. Referencing the Guidance to safety in confined spaces, U.S. Department of Health and Human Services/National Institute for Occupational Safety Health Publication No. 87-113.

#### 1.04 USE OF PREMISES

- A. The Contractor shall not trespass upon or in any way disturb private property without first obtaining written permission from the property Owner and/or Owner or Prime Contractor as appropriate to do so. A copy of such written permission shall be furnished to the City prior to accessing the site.
- B. It shall be the Contractor's responsibility to work equipment around poles, trees, or other obstructions and to do so at his own expense.
- C. If the Contractor finds it necessary to obtain additional working area, it shall be the Contractor's responsibility for its acquisition.
- D. The Contractor shall, at no additional expense, restore such property to the original condition in the sole and unfettered opinion of the property Owner. The Contractor must take photographs and/or videos of existing properties prior to disturbance of each property and make a copy available to the City.
- E. All items within the street right-of-way or sewer easement shall be removed, or removed and replaced, or restored as directed by the City.
- F. The Contractor shall ensure all employees have a badge or visible identification during any time that they on the project site or within private property. This identification must be worn so that it is readily recognized and readable to the public.

#### 1.05 WATER FOR CLEANING

- A. The City shall provide access to water via fire hydrants for cleaning and other work items requiring water. The Contractor will be responsible for obtaining a transient water meter for water used in performance of work. There will be no cost to the contractor for use of water required for rehabilitation work.





## 1.06 PROTECTION OF TREES

- A. The Contractor shall avoid any unnecessary damage to trees. Branches which overhang the project limits, and which interfere with the operation of equipment shall be tied back to avoid damage, if possible. Where injury to branches is unavoidable, the branches shall be sawed off neatly at the trunk or main branch, and the cut area shall be protected with approved pruning spray immediately. The Contractor at no additional expense shall remove any trees damaged beyond saving and make restitution to the Owner (public or private).

## 1.07 FENCING

- A. Any fences, including hedge and shrubs, that need to be removed to facilitate the work shall be replaced, in kind or with repairs satisfactory to the Owner, at the Contractor's expense. Payment for replacement of fences, hedges, and shrubs is covered in Part 4 paragraph 4.01.FF.

## 1.08 RESTORATION

- A. All roadway berms and drainage ditches disturbed by the work shall be restored, reshaped, and graded to drain.
- B. Pavement restoration, if necessary, shall conform to the City, County, or State standards and specifications depending upon who has jurisdiction for the street. Trench backfill and compaction shall be in conformance with the local street restoration jurisdiction.
- C. The remediation of sunken trenches caused by activities conducted in this contract shall be the Contractor's responsibility. Sunken areas shall be backfilled and compacted to meet adjoining grades; the surface shall be re-seeded or resurfaced with asphalt or concrete matching the existing surfacing.
- D. The Contractor shall restore unpaved areas by seeding and mulching. No direct payment will be made for seeding and mulching.
- E. Driveways shall be restored in accordance with Owner's regulations, or the Owner's Specifications depending upon who has jurisdiction for the driveway.
- F. All disturbed areas shall be restored as nearly as possible to their original condition.
- G. All restoration shall be completed in strict accordance with the appropriate items of the standards, specifications or matching the pre-work conditions as directed by the Owner.
- H. The cost of all restoration of streets, drives, walks; sod, etc. shall be incidental to the contract and not measured for payment.
- I. Restoration shall be kept current with the project work. Failure to keep restoration of these items completed reasonably close shall result in a stop work notice and delay of payment until such restoration is completed to the satisfaction of the Owner.

## 1.09 CLEANUP

- A. The Contractor shall keep the work area in an uncluttered condition by the frequent removal of debris. The Contractor shall remove all debris and unused material and leave the area in a condition similar to the condition of the area before any work was performed.



## 1.10 PROPERTY DAMAGE

- A. The Contractor shall immediately investigate any and all reports of sewage backing up into fixtures served by the sewer section upstream of the manhole that is being rehabilitated.
- B. The Contractor will be required to notify the City immediately if he causes any damage to private or public property caused by activities related to this contract. The Contractor shall make repairs and/or clean the property immediately in a timeframe that is acceptable to the Owner.
- C. The Contractor shall furnish equipment, either specialized or standard in the industry, for the purpose of preventing debris from being washed past the manhole, inlet, or outfall downstream of the line segment being cleaned, and for removing the debris from the structure before any damage is caused to the system performance and or system equipment such as pump/lift stations, check valves, flow-ways, etc. The cost of all system downtime and repairs to restore operational status resulting from construction debris damage that in the City's opinion was reasonably preventable will be borne by the Contractor.

## 1.11 REFERENCES

- A. Applicable Codes, Specifications, and Standards
  1. American Society for Testing and Materials (ASTM), Latest Editions
    - a. A48, Standard Specification for Gray Iron Castings
    - b. A240, Standard Specification for Chromium and Chromium Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
    - c. A479, Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels
    - d. C109, Standard Test Method for Compressive Strength of Hydraulic-Cement Mortars
    - e. C150, Standard Specification for Portland Cement
    - f. C157 Standard Test Method for Length Change of Hardened Hydraulic Cement and Polymer Concretes
    - g. C216, Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)
    - h. C267, Standard Test Method for Chemical Resistance of mortars, grouts and Monolithic Surfacing and Polymer Concrete
    - i. C270, Standard Specification for Mortar for Unit Masonry
    - j. C293, Standard Test Method for Flexural Strength of Concrete
    - k. C308, Standard Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacing.
    - l. C321, Standard Test Method for Bond Strength of Chemical Resistant Mortars
    - m. C348, Standard Test Method for Flexural Strength of Hydraulic Cement Mortars
    - n. C478, Standard Specification for Circular Precast Reinforced Concrete Manhole Sections
    - o. C496, Tensile Strength of Chemically Setting Silicate and Silica Chemical Resistant Mortars
    - p. C580, Standard Test Method for Flexural Strength and Modulus of Elasticity of



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Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes

- q. C596, Standard Test Method for Drying Shrinkage of Mortar Containing Hydraulic Cement
  - r. C882, Standard Test Method for Bond Strength of Epoxy-Resin Systems Used with Concrete by Slant Shear
  - s. C923, Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals
  - t. Standard Test Method for Bond Strength of Mortar to Masonry Units
  - u. D412, Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers – Tension, Tensile Strength and Elongation %
  - v. D4787, Standard Practice of Continuity Verification of Liquid or Sheet Linings Applied to Concrete Substrates
  - w. D543, Resistance of Plastics to Chemical Reagents
  - x. D638, Standard Test Method for Tensile Properties of Plastics.
  - y. D695, Standard Test Method for Compressive Properties of Rigid Plastics.
  - z. D790, Standard Test Methods for Flexural Properties of Plastics
  - aa. D792, Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
  - bb. D2240, Standard Test Method for Rubber Property – Durometer Hardness
  - u) D2344/D2344M, Standard Test Method for Short-Beam Strength of Polymer Matrix Composite Materials and Their Laminates
  - v) D2039, Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials
  - w) D3039, Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials
  - x) D4060, Standard Test Method for Abrasion Resistance of Organic Coatings by The Taber Abrader
  - y) D4414, Standard Practice for Measurement of Wet Film Thickness of Organic Coatings by Notched Gage
  - z) D4541 Standard Test Method for Pull Off Strength of Coatings Using Portable Adhesion Testers
  - aa) D4787 Continuity Verification of Liquid or Sheet Linings Applied to Concrete Substrates
  - bb) D6132 Standard Test Method for Nondestructive Measurement of Dry Film Thickness or Applied Organic Coatings Using an Ultrasonic Coating Thickness Gage.
  - cc) D7234, Pull-off Strength of Coatings Using a Portable Adhesion Tester
  - dd) F593, Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs
  - ee) F2414, Standard Practice for Sealing Sewer Manholes using Chemical Grouting.
  - ff) F2551, Standard Practice for Installing a Protective Cementitious Liner System in Sanitary Sewer Manholes
  - gg) G210, Severe Wastewater Analysis Test
2. Federal Specifications
- a. HH-P-117, Jute Packing
3. Steel Structures Painting Council – Surface preparation standards, Society of




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- Protective Coatings published standards.
  - a. SSPC SP-13 Surface Preparation of Concrete
- 4. NACE International (Formerly the National Association of Corrosion Engineers)
  - a. NACE No. 6 Surface Preparation of Concrete
  - b. NACE SP0188 – For performing holiday detection
- 5. City of St. Augustine (COSA) Standards and Specifications Design Manual and Details

1.12 RESPONSIBILITY FOR OVERFLOW AND SPILLS

- A. It shall be the responsibility of the Contractor to schedule and perform his work to result in no overflows or spills of sewage from the system. If sewage flows are such that they interfere with the Contractor’s ability to perform work, the Contractor shall be responsible for scheduling his work during low flow periods or provide bypass pumping. Bypass pumping shall be provided only with the specific written approval of the City.
- B. In the event of overflows caused by the Contractor’s work activities, the Contractor shall immediately take appropriate action to contain and stop the overflow, clean up the spillage, and disinfect the area affected by the spill. The Contractor shall also notify the City Utility Manager immediately upon becoming aware of the discharge. They will provide instructions on this notification during and after normal business hours, nights, weekends and holidays.
- C. The Contractor will reimburse the City for all sampling, testing and analysis necessary to document that the contamination caused by overflows or spills associated with their work has been eliminated.
- D. In the City’s opinion, if the Contractor has not taken immediate actions necessary when a spill or overflow occurs the City will provide the labor, equipment, materials and related costs to stop the overflow, clean up the spillage and disinfect the area. The Contractor will be responsible to reimburse the City for all documented costs incurred as a result of spills and overflows related to the Contractor’s work.
- E. Immediate actions are to be taken to stop the overflow and eliminate the potential public health hazard. Actions to address overflows is a condition precedent to all work.
- F. All overflows, regardless of quantity will needed to be documented on a Sanitary Sewer Overflow (SSO) Report and submitted to the Florida Department of Environmental Protection Northeast District Office.
- G. Contractor will indemnify and hold harmless the City for any fines or third-party claims for personal or property damage arising out of a spill or overflow that is fully or partially the responsibility of the Contractor. Should fines subsequently be imposed as a result of any overflow for which the Contractor is fully or partially responsible, the Contractor shall pay all such fines and all of the City’s legal, engineering, and administrative costs in defending such fines and claims associated with the overflow or spill.

1.13 SHOP DRAWINGS, SUBMITTALS, AND DEMONSTRATIONS


- A. Manhole and Structures Condition Assessment Inspection Reports 
  - 1. Manhole and Structures inspection work plan that includes a detailed schedule of activities and working hours. Resubmittal will be required if the sequence, duration,



- or dates of inspections change from the initial work plan.
2. Reference Section 02764 Televising Existing Manholes, Wet Wells, and Stormwater Structures for submittal documentation.
  3. Reports shall be formatted and coded to be in compliance with NASSCO MACP standards and include text reports with digital photographs of the noted defects.
  4. Reports will include rehabilitation recommendations.
- B. Manholes wet well and Stormwater Structures assessment submittal approvals will establish the rehabilitation procedures that will be performed on each manhole. All other product and rehabilitation submittals will be based on these procedures. ▲
- C. Product data and/or shop drawings for rehabilitations are to be submitted with each work order proposal submittal. In the case where exact products and/or fabrications have been previously approved under a separate work order then these items only require a reference to the work order under which the item was approved.
- D. A pre-video of the manhole area and internal conditions is to be submitted prior to rehabilitation work.
- E. Plans and procedures are to be submitted prior to starting preparation for manhole rehabilitation in accordance with the General Conditions and 01300 "Submittals."
- F. Structural design for manhole and stormwater structure rehabilitation is to be performed by a State of Florida licensed Professional Engineer, if applicable. ▲
- G. Work Plan Submittals.
1. Site Safety Plan
  2. Quality control plan.
  3. Collection System Bypass Plan.
  4. Emergency Plans.
    - a. Procedure for health or safety emergency
    - b. Overflows, spills, service backups
    - c. Hazardous chemical spills
- H. Certifications and License. ▲
1. Refer to Section 01001 paragraph 1.10.E for requirements.
- I. Contact list with primary and secondary contacts.
- J. Sample public work notifications, door hangers.
- K. Warranty certificate form
- L. Grout.
1. Catalog data showing manufacturer's clarifications and updates, ASTM references, material composition, specifications, and physical and chemical properties of grout.
    - a. Chemical Grout Information:
      - 1) Description of chemical grout materials.
      - 2) Description of proposed additives to be used.
      - 3) Manufacturers recommended procedures for storing, mixing, testing, and handling of chemical grouts.
      - 4) SDS sheets for all materials to be used.
  2. Calculations of expected volumes of annular space between packer and pipe wall, to be used in calculating required gel times.



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3. Manufacturer's recommended procedures for handling, storing, mixing and injecting grout.
4. Method of Construction.
  - a. Access manholes and site locations.
  - b. Work dimensions.
  - c. Size of working area.
  - d. Site access points.
  - e. Grout manufacturer's certification that Contractor is approved installer of their system. Certificates of training in handling, mixing, and application of grout for sanitary sewer line and joint and lateral connection sealing for grout truck operator and at least one crewmember involved in sealing process.
  - f. Third party lab test results for field installations in United States of same grout system as proposed for actual installation.
  - g. a. Test results must verify grout physical and chemical properties specified herein have been achieved in previous field applications.
  - h. Documentation for Products and Installers: Engineer's approval required before acceptance or injection of grout.
  - i. Proof of grout manufacturer's product liability insurance, if requested by Engineer.
  - j. Pump calibration information.
  - k. Field sealing records.
  - l. Certification of accuracy and calibration of pressure sensing/monitoring equipment by independent testing firm within one month before use of equipment.
- 6) Upon completion of grouting, submit a report showing the following data for each manhole grouted or attempted to be grouted.
  - a. Identification of the Manhole or structure ID number. 
  - b. Type of manhole, brick or concrete with depth to invert from top of frame rim.
  - c. Pass/fail results.
  - d. Volume of grout material used.
  - e. Gel set time used (cup test results from tanks)
  - f. Grout mix record of the batches mixed including amount of grout and catalyst, additives, temperature of the grout solution in tanks.
  - g. Operator conducting testing and sealing shall be noted on the reports.

M. Coatings/Linings Applicator Qualifications.

1. Manufacturer's applicator certificate.
2. Application equipment meets Manufactures requirements.
3. Manufacturers' Certificate of Compliance certifying compliance with the applicable Specifications and Standards. The certifications shall list all materials furnished under this Section.

N. Submittals shall include manufacturer's product descriptions and use, Specifications, independent testing reports, handling, storage, mixing, application, curing, and cleanup requirements. If a Safety Data Sheet (SDS) has been developed for the product it shall also be provided.

O. Manhole, Wet Well and Stormwater Structure Liner/Coating Systems/Chcmical



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Grouts/Chimney Seals: ▲

1. Certified copies of factory tests required by the applicable Standards, the Manufacturer, and this Section.
2. Manufacturer's handling, storage, and installation instructions and procedures.
3. Surface Preparation requirements
4. Pre/Post adherence testing
5. pH test after prep
6. Product data including
  - a. Sample of coating products
  - b. Surface preparation requirements
  - c. Product data

P. Lids and Frames, Inflow Dishes, Lid Seals, Casting Seals, and Adjustment Rings

1. Product data
2. Shop Drawings
3. Installation instructions, if applicable.

Q. Manhole and Stormwater Structure adjustment, Patching and Repair materials. ▲

- R. Post rehabilitation report that provides a complete and accurate record of all rehabilitations performed and list of products used. This report shall include a video record of the completed interior and area work.

#### 1.14 PRODUCT MANUFACTURERS DEMONSTRATIONS

- A. Use of all materials that require surface preparations, handling, mixing, and curing will require demonstration and explanation of these aspects to City personnel if approved for use on City facilities. This demonstration will be provided at a designated existing manhole, wet well, or stormwater structure at a time approved by the City. This demonstration will need to be provided to the Cities satisfaction prior to further use on City facilities ▲
- B. Demonstrations are to be provided prior to delivery and installation of grout or coating/lining systems approved for use in manhole rehabilitation.

## PART 2 - PRODUCTS

### 2.01 - GENERAL

A. Materials

1. The materials used shall be designed and manufactured for the rehabilitation of Sanitary Sewer Manholes, Wet Wells and Stormwater Structures. The materials shall have a proven history of extended service performance in this application and be compatible with all existing and new materials used in the manhole rehabilitation.
2. All materials shall be delivered to the job site in original unopened packages clearly labeled with the manufacturer's identification and printed instructions. ▲



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3. All materials shall be stored and handled in accordance with recommendations of the manufacturer.
4. All materials shall be mixed and applied in accordance with the manufacturer's written instructions.
5. The Contractor shall warrant and hold harmless the City against all claims for patent infringement and any loss thereof.
6. Handle and store all materials and dispose of all wastes in accordance with applicable regulations.
7. Each lining system shall be designed for application over wet surfaces (but not active running water) without degradation of the final product and/or the bond between the product and the manhole surfaces.
8. All finished products used in the rehabilitation of manholes shall be suited for its intended purpose, seal and protect the internal surfaces from deterioration due to corrosive conditions and perform and provide extended service life to the extent represented by the product manufacturers.

## 2.02 INSPECTION SOFTWARE

- A. Inspections shall use software that can provide complete survey reports in compliance with current version of NASSCO MACP/PACP software. No payment will be rendered for improperly formatted data.
- B. NASSCO MACP and PACP fields, as well as any additional available fields requested by the City or his representative shall be populated during the inspections with valid NASSCO values. All reports and/or submittals shall use NASSCO MACP/PACP Standards as a basis.

## 2.03 DIGITAL CAMERA FOR REMOTE INSPECTIONS

- A. All manhole photographs required as part of this specification shall be obtained using a minimum 4-megapixel digital camera with strobe flash capable of producing digital images with minimum resolution of 2240 x 1680.
- B. The camera shall be capable of zoom focus to provide clear photographs of the entire vertical depth of the manhole.
- C. The camera equipment/software shall be capable of producing digital images of all manhole, wet well and storm structure defects. The digital photographs shall become the property of the City.
- D. Each portable hard drive shall contain the following information and arrangement at the beginning as a title screen:
  - St. Augustine, Florida
  - Collection Basin Number
  - Contract Number
  - Work Order Number
  - CONTRACTOR: (Name of Contractor)
  - DATE: (When photo was taken)
  - LOCATION: (Description of Location(s) and View(s))
- E. Written documentation must coincide with the information on the photograph to make



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easy retrieval of locations at a later date.

## 2.04 GROUT – GENERAL

- A. Grout manufacturer will select the type of grout to be used for sealing the manhole based on the manhole installed conditions.
- B. While being injected, the grout must be able to react /perform in the presence of water (groundwater).
- C. The ability to increase grout mix viscosity, density and gel strength by increased concentration of constituents or the use of approved additives.
- D. The cured grout must withstand submergence in water without degradation.
- E. The resultant grout formation must be homogeneous and prevent the passage of water (infiltration) through the manhole base, barrel, cone, and chimney.
- F. The grout must not be biodegradable.
- G. The cured grout should be chemically stable and resistant to organics found in costal ground water and sewage.
- H. Residual grout shall be easily removable from the interior surfaces of the manhole to prevent performance of other manhole rehabilitation products.
  - 1. Handle, mix, and store grout in accordance with the manufacturer's recommendations. The materials shall be delivered to the site in unopened original manufacturer's containers.
  - 2. Chemical grout sealing shall be in accordance with ASTM F2414 latest edition Standard Practice for Sealing Sewer Manholes Using Chemical Grout.

## 2.05 GROUT PRODUCTS

- A. Properties and Characteristics.
  - 1. Will perform in presence of infiltrating water (groundwater), during injection.
  - 2. Packaged for field storage, handling requirements with minimum spillage and worker safety.
- B. Cured grout:
  - 1. Submergible in water without degrading.
  - 2. Not biodegradable.
    - a. Additives may be used to meet this requirement, without effecting long-term strength.
  - 3. Chemically stable and resistant to concentrations of acids, alkalis, and organic materials found in normal sewage.
- C. Composition.
  - 1. Acrylamide gel:
    - a. Minimum of 10 percent acrylamide base material by weight in total grout mix.
    - b. Higher concentration percent of acrylamide base material (maximum 20%) may be used to increase strength or offset dilution during injection.
    - c. Able to tolerate some dilution and react in moving water during injection.
- d. Approximately 2 centipoise viscosity. Can be increased with additives.
  - e. Constant viscosity during reaction period.
  - f. Controlled reaction time from 10 seconds to 1 hour.



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- g. Curing reaction producing a homogenous, chemically stable, non-biodegradable, firm, flexible gel.
  - h. Able to prevent dehydration and increase-mix viscosity, density and gel strength by use of additives.
  - i. Diatomaceous earth (Celite 209 or equal) can be added to concentration of five percent.
  - j. Use of other additives following manufacturer's recommendation and Engineer's approval.
  - k. Root control additive 2, 6-Dichlorobenzonitrile, may be added following manufacturer's recommendation and Engineer's direction.
2. Urethane gel:
- a. Ratio: One-part urethane prepolymer mixed with 5 to 10 parts water by volume.
  - b. Recommended mix ratio: 1-part urethane prepolymer to 8 parts of water (11 percent prepolymer).
  - c. Liquid prepolymer:
  - d. Solids content: 77 to 83 percent.
  - e. Specific Gravity: 1.04 (8.65 pounds per gallon)
  - f. Flash Point: 20 degrees F.
  - g. Viscosity: 600 to 1,200 centipoises water at 70 degrees F.
  - h. Water for reacting prepolymer: pH of 6.5 to 8.
  - i. Curing reaction:
    - 1) Produces chemically stable, non-biodegradable, tough, flexible gel.
    - 2) Able to increase mix viscosity, density, gel strength and resistance to shrinkage by using additives in water component of grout.
    - 3) Minimum 15 percent shrink control agent supplied by the same manufacturer.
3. Acrylate gel:
- a. Minimum 10 percent acrylate base material by weight or as specified by the manufacturer.
  - b. In total grout mix, a higher concentration (percent) of acrylate base material may be used to increase strength or offset dilution during injection.
  - c. If acrylate base material is in 40 percent solution 27.5 percent by weight of total grout mix: 11 percent base material.
  - d. Able to tolerate some dilution and react in moving water during injection.
  - e. Viscosity: Approximately 2 centipoises.
  - f. Can be increased with additives.
  - g. Constant viscosity during reaction period.  
Controlled reaction time: 10 seconds to 1 hour.
  - h. Curing reaction producing homogeneous, chemically stable, non-biodegradable, flexible gel.
  - i. Able to prevent dehydration and to increase-mix viscosity, density and gel strength by use of additives.
    - 1) Diatomaceous earth (Celite 209 or equal) can be added to concentration of five percent, by volume.
    - 2) Use of other additives following manufacturer's recommendations and Engineer's approval.
  - j. Root control additive 2, 6-Dichlorobenzonitrile, may be added following manufacturer's recommendation and Engineer's direction.



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D. Additives

1. At the CONTRACTOR'S discretion and according to field conditions, additives may be selected and used within the manufacturers recommended quantities.
2. Strengthening Agents
  - a. For joint grouting, a latex or "diatomaceous earth" additive may be added to increase compressive and tensile strength. The quantity of strengthening agent additive shall be as recommended by the manufacturer and approved by ENGINEER. Product Manufacturer:
3. Root Inhibitor
  - a. When roots are present, for joint and lateral connection joint grouting, a root deterrent chemical shall be added to control root re-growth. The quantity of inhibitor shall be as recommended by the manufacturer and approved by ENGINEER.
4. Dye
  - a. A manufacturer approved water soluble dye without trace metals may be added to the grout tank(s) for visual confirmation.
5. Gel Time Modifier
  - a. A gel time extending agent may be used in accordance with the manufacturer's recommendations to extend gel time as necessary.
6. Freeze/Thaw
  - a. In those lines where the grouting material may be exposed to a freeze-thaw cycle, ethylene glycol or other ENGINEER approved additive shall be used to prevent chemical grout cracking once set.
7. Gel shrink control, and accelerators.
8. When using non soluble additives the grout tanks must have mechanical mixing devices to keep the additives in suspension and maintain a uniform solution of grout and additive.

2.06 PATCHING OR REPLACEMENT OF INVERT AND BENCH

- A. Materials used for bench and trough repairs shall be a rapid setting, high early strength, non-shrink material.
- B. Products shall not contain chlorides or metallic particles and shall be mixed and applied in accordance with the manufacturer's recommendations.
- C. Repair and patching material shall be compatible with all material components and lining system applied to the manhole.
- D. Patching material shall be rapid setting, fiber reinforced, calcium aluminate, corrosion resistant, cementitious material, that meets the following minimum requirements:

Compressive Strength ASTM C109	2400 psi, 24 hours
Bond ASTM C321	2000 psi, 28 days
Cement	Calcium Aluminate, Sulfate resistant
Sulfate Resistance ASTM C267	Inert
Shrinkage ASTM C596	0 percent at 90 percent relative humidity



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- E. Products shall be Strong-Seal QSR Plus and High-Performance Mix as manufactured by the Strong Company, Pine Bluff, AR; Quadex AluminaLiner as manufactured by Quadex Inc., North Little Rock, AR; EucoRepair V100, Euclid Chemical, Cleveland, OH; or approved equal. ▲
- F. Repair shall be top coated to provide protection against chemical and biological corrosion, if this protection is not integral to the product.

2.07 SEALING ACTIVE LEAKS

- A. Infiltration control material shall be rapid setting epoxy or cementitious product that is corrosion resistant and specifically formulated for leak control to stop minor infiltration and to make repairs in sanitary sewer concrete and brick structures. Minor infiltration is defined by dripping or seepage where visual water may be on the surface but not projecting beyond the surface of the wall of the structure.
- B. Use of Grout materials shall meet the requirements of paragraph 2.05 for severe infiltration control.

2.08 CEMENTITIOUS LINING SYSTEMS GENERAL

- A. Cementitious manhole lining materials shall exhibit the following properties:
  - 1. Cementitious restoration products shall be specifically designed for the rehabilitation of manholes and other related wastewater structures.
  - 2. Liner products shall be cement based, fiber reinforced, shrinkage compensated and enhanced with chemical admixtures and siliceous aggregates.
  - 3. Liner products shall be mixed with water per manufacturer's written specifications and applied using equipment specifically designed for troweling, low-pressure spray or centrifugal spin casting application.
  - 4. All cementitious liners shall be troweled to densify and smooth out the surfaces.
  - 5. Materials shall be specifically formulated to withstand H2S (hydrogen sulfide) bacterial corrosion and abrasion in sanitary sewer systems.
- B. Spray applied or centrifugally cast structural reinforced cement manhole lining
  - 1. The material applied to the surface of the manhole shall be a cementitious blend of calcium aluminate cement and manufactured calcium aluminate aggregates for constructing a liner that is impervious to the flow of water, is resistant to sulfide attack, and restores structural integrity to existing manhole walls.
  - 2. A monolithic liner shall be formed which covers all interior manhole surfaces and shall have the following minimum requirements at 28-days:

Compressive Strength (ASTM C579)	9,000-psi
Tensile Strength (ASTM C496)	800-psi
Flexural Strength (ASTM C293) (Modified)	1200-psi
Shrinkage (ASTM C596)	0% at 95% R.H.
Bond (ASTM C882)	2000 psi
Density, when applied	130 pcf
pH >1	No deterioration



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## 2.09 MULTI-COMPONENT STRESS SKIN PANEL LINER SYSTEM

- A. The material applied onto the surface of the manhole shall be a multi-component stress skin panel liner system designed to withstand the effects of hydrogen sulfide without any deterioration to the liner. The liner shall be a solvent free, two-component polymeric, moisture/chemical barrier specifically developed for the wastewater environment. The cured epoxy resin system shall conform to the following minimum Structural Standards:

### Minimum Structural Standards

Cured Product	Test Method	Results
Tensile Strength	ASTM C496/D638	2000-psi
Flexural Strength	ASTM C293/D790	2500-psi
Bond Strength	ASTM C882/D4541	2000-psi
Shrinkage @ 95% R.H.	ASTM C596	0%
Compressive Strength	ASTM C579	8,000-psi
Compressive Strength	ASTM D695	8,000-psi
Chemical & Biological Corrosion		None @ pH 2.0

1. Manholes in which the pH may be less than 2.0 or less, an additional liner/coating may be required to provide complete corrosion protection.
2. Product to accompany a certified letter from the manufacturer for a 10-year performance warranty.
3. Linings shall be 1/2" minimum thickness and finished surfaces shall conform to the original configuration of the manhole.

## 2.10 COATING PRODUCTS

### A. General

1. Coating products shall be applied to manholes specified to receive a corrosion protective coating sufficiently thick to totally protect the existing host structure from further corrosion, deterioration and water vapor transmission. Coating materials must be compatible with the manhole rehabilitation SYSTEM. Substrate and surface preparation, application conditions, application equipment, material preparation, and curing shall be in strict accordance with the manufacturer's written recommendations.
2. Apply Organic Linings to manhole interior walls and benches.

## 2.11 EPOXY RESIN AND POLYURETHANE SYSTEM MANHOLE AND STORMWATER STRUCTURE COATINGS ▲

- A. The material sprayed onto the surface of the manhole and stormwater structures shall be an epoxy resin or polyurethane system formulated for application within a sanitary sewer



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environment. The resin will exhibit suitable corrosion resistance and enhance the structural integrity of the existing manhole or structure. ▲

- B. Epoxy shall be microbe resistant.
- C. Suitable for all interior surfaces of manhole less frame and cover.
- D. Application shall be a monolithic lining.
- E. System to be from one manufacturer.
- F. Compatible with either Portland cement, concrete block or clay brick surfaces.
- G. System to provide abrasion, impact, and chemical resistance to wastewater environment with long detention times and elevated temperatures.
- H. The epoxy or polyurethane manhole or stormwater structure liner shall be a chemical resistant (below a pH of 2.0), VOC compliant, moisture tolerant, 100% solids, two (2) component epoxy system with the following properties: ▲

Flexural Strength (ASTM D790)	10,000 psi
Compressive Strength (ASTM D695)	10,000 psi
Tensile Strength (ASTM D638)	6,300 psi
Adhesion (ASTM D4541/7234)	Substrate Failure
Taber Abrasion, CS17 wheel (ASTM D4060)	< 112 mg loss, 1 Kg/1000 cycles
Elongation (ASTM D638)	1.5 %
Shore D Hardness (ASTM D2240)	85

- I. Coating Products shall be an Organic Coating for use in Wastewater Manholes:
  - 1. Raven 405 High Build Epoxy Liner, .3 inches minimum thickness, as manufactured by Raven Lining SYSTEMs Inc., Tulsa, OK.
  - 2. Structure Guard by Quadex, .3 inches, minimum thickness, manufactured by Vortex Infrastructure, Houston, TX.
  - 3. Spraywall by SprayRoq, Irondale, Al. ▲
  - 4. Or Approved Equal systems.

## 2.12 MANHOLE SEALS

- A. Chimney Coating Seals
  - 1. Chimney seals shall be used for the purpose of preventing leakage of water into the manhole through the frame joint area and the area above the manhole cone including all extensions to the chimney area. Extensions shall include adjustment rings and/or material used to achieve grade.
  - 2. Coatings shall be 100% solids epoxy, moisture tolerant, high tensile strength, chemically resistant to sulfuric acid and inert to hydrogen sulfide sewer gas.
  - 3. Chimney Seals shall be:
    - a. Flex-Seal as manufactured by Sealing SYSTEMs Inc., Loretto MN, listed on SPL WW-511 Organic Lining for Wastewater Manholes.
    - b. NPR-3501 as manufactured by Neopoxy International, Hayward, CA.
    - c. Parsonpoxy FP as manufactured by Parson Environmental Products, Inc., Wernersville, PA.
    - d. Reactamine 760 as manufactured by Carboline, St. Louis, MO. ▲
    - e. Or Approved Equal.



B. Chimney Mechanical Seals

1. Seals shall be designed to provide an interior flexible watertight seal between the manhole cover frame and cone section. The seal shall be rubber with stainless steel expansion bands. Seal shall be capable of repeated vertical and horizontal movements of not less than 2-inch installation with a minimum 25-year design lift.
2. Rubber sleeves shall be extruded from a high-grade rubber compound meeting the applicable requirements of ASTM C923. Sleeves shall be double, or triple pleated with a minimum unexpanded vertical height of 8-inches, a minimum thickness of 3/16-inch, and have integrally formed top and bottom expansion band recesses and multiple sealing fins. Any splices shall be factory vulcanized and shall be able to withstand a 180-degree bend with no visible separation at splices.
3. Expansion Bands shall be 16-gauge thickness, 1-3/4-inches wide and made of stainless-steel meeting ASTM A240, Type 316. Bands shall have an expansion mechanism capable of developing the pressure necessary to provide a watertight seal, a minimum adjustment range of not less than 2-inches and a positive locking mechanism. Bands shall be removable with minimum effort and reusable.

C. Ring Casting Seals

1. Ring casting seals shall be used for the purpose of eliminating infiltration and forming a bond between the ring casting and grade adjustment ring or cone.
2. Refer to mechanical seals listed under Chimney Mechanical Seals.

D. Precast Manhole Joint sealing.

1. Joint seals may be accomplished with use of chemical grout or mechanical type inserts.
2. Installation or application of the seal needs to be in accordance with the manufacturer's instructions in relation to preparation, mixing, and insertion or installation.
3. Expanded Gasket, use of an elastomeric polyurethane resin-soaked oakum method, using dry twisted jute oakum meeting Federal Specification HH-P-117 or resin rod with polyurethane resin (water activated).
4. Manufactured Seal, flexible seal portion of the seal is made of a rubber type product, it shall have a minimum thickness of 3/16", a minimum unexpanded width of 8 inches, and be fabricated from a high-grade rubber compound conforming to the applicable requirements of ASTM C923. The internal seal shall have a double pleated and the external seal a corrugated, coverage shall be made of the same material and have the same minimum thickness as the compressing the sleeve and extension against the manhole shall be fabricated from minimum 16-240, Type 304, for sheet and ASTM A479, Type 304, for rods. Any screws, bolts or nuts used on these bands shall be stainless steel conforming to ASTM F593, Type 304.

## 2.13 MANHOLE FRAME AND COVER

A. Manhole frame and cover to meet requirements of City of St. Augustine Storm/Sewer Manhole Cover and Frame shown of Standard Construction Detail SS-1.

1. Gray iron castings for manhole frames, covers, adjustment rings, and other items shall conform to the ASTM Designation A48, Class 30. Castings shall be true to pattern in form and dimensions and free of pouring faults and other defects which would impair their strength or otherwise make them unfit for the service intended. The seating surfaces between frames and covers shall be machined to fit true. No plugging or



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filling will be allowed. Lifting or "pick" holes shall be provided but shall not penetrate the cover. Casting patterns shall conform to those shown or indicated on the STANDARD DETAILS. All manhole frames and covers shall be traffic bearing to meet AASHTO H-20 loadings. Frames shall be suitable for the future addition of a cast iron ring for upward adjustment of top elevation. In certain locations, such as in flood prone areas, install inflow dishes and/or gasketed covers. Locations where dishes and gaskets are to be installed will be designated by the CITY.

## 2.14 MANHOLE ADJUSTMENT RINGS

- A. Brick courses shall be a minimum of two (2) and a maximum of four (4). Mortar shall conform to ASTM C270, type M. Bricks shall be made of clay and conform to ASTM C216, grade SW, and sized 3 1/2 inches (w) x 8 inches (l) x 2 1/4 inches (h).
- B. Precast concrete grade rings shall be reinforced in accordance with ASTM C478 latest edition. The inside dimension shall match the existing interior surface of the manhole. The exterior dimension shall not be less than the exterior dimension of the manhole at the top of the cone section. The grade ring shall be Type V, 4000 psi at 28 days.

## 2.15 INFLOW DISH

- A. General
  - 1. An inflow dish shall be installed at manholes designated by the City.
  - 2. Inflow dishes and components shall be manufactured of material resistant to corrosion from atmospheres containing hydrogen sulfide and dilute sulfuric acid.
  - 3. The inflow dish material of construction depends on the location of the manhole.
  - 4. Inflow dishes shall include tethers.
  - 5. Inflow dishes shall allow venting of sewer gasses.
- B. Dish Material
  - 1. Manholes located in undeveloped areas, gravel surface roads, residential asphalt surfaced roads may be manufactured from high molecular weight polyethylene (HMWPE), high density polyethylene material, comply with UL Standard, 94-HB and meet all associated ASTM specifications related to Prime HDPE 250. Gaskets shall be closed cell neoprene material, .5" wide, and .125" minimum thickness, with pressure sensitive adhesive on one side. Straps to be woven nylon fastened to the dish body with stainless steel fasteners and washers.
  - 2. Manholes located on paved high traffic areas are to be manufactured from stainless steel.
    - a. Fabricated from 304 or 316 stainless steel with a minimum thickness of 16 gauge.
    - b. Gasket, matching HMWPE dishes.
    - c. Tether manufactured from 3/16" braided stainless steel attached with a stainless-steel rivet and washers to prevent tether failure. Cable terminal end and eye manufactured from stainless steel.
    - d. Relief valve, gas relief valve designed to release at a pressure of .5 to 1.5 psi and release less than 5 gallons of water in 24 hours. Valve is threaded and screwed into a hole drilled in the bottom of the insert. The valve is to be made from



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material that is inert from Sulfuric Acid, Hydrogen Sulfide and other substances found in Sanitary Sewer Systems.

- e. The City will designate manholes to receive stainless steel dishes.

## 2.16 MANHOLE LID SEALS

- A. Cover seals shall be horizontal style.
- B. Gaskets shall be minimum of .6" wide, and .15" thick.
- C. Circumference of gaskets shall be capable of sealing with an outside diameter of 36 inches.
- D. Cover lid, U-shaped pick hole plugs sized to fit and shall be supplied by Cretex Specialty Products or approved equal.

## PART 3 - EXECUTION

### 3.01 GENERAL

- A. Safety:
  - 1. The Contractor shall perform all work in strict accordance with all applicable OSHA, TOSHA, and manufacturer's safety standards. Each method of manhole rehabilitation in this Section requires some degree of manhole entry by workers. Particular attention is drawn to those safety requirements regarding confined space entry and respiratory protection from airborne particulate materials during cleaning and product mixing and application.
- B. Work Notices
  - 1. Rehabilitation work notifications, door hangers, are to be distributed a minimum of 72 hours prior to commencement of any activities. Notices will not be required during Manhole, Wet Well and Stormwater Structure inspections provided driveways or streets access to and from residences or businesses is not restricted. ▲
- C. Maintenance of Traffic
  - 1. The Contractor must setup and maintain any necessary or required traffic control devices prior to commencing work and continue until work is complete and site restored.
- D. Bypassing
  - 1. All plugging and bypassing must be in place and maintained prior to and until the manhole rehabilitation and testing allows for flow to be restored.
- F. Contractor to submit an updated schedule of inspection or rehabilitation activities on a bi-weekly basis.

### 3.02 INSPECTION PREPARATION

- A. Level 1 and 2 inspections shall be made by Confined Space Entry or Camera. ▲
- B. Contractor shall insert a measuring rod into the interior of the manhole to verify rim to invert distance measurements of the manhole, as well as the invert of each adjoining pipe.
- C. City is responsible for location of buried and/or manhole discovered in field.
- D. Contractor is solely responsible for all damages resulting from operations.



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- E. Upon completing inspections manhole cover and any displaced items moved back into place.
- F. Inspection photos, reports and databases shall be delivered on an external hard drive. The external hard drive will become the property of the City. ▲
- G. Each inspection report shall be provided in PDF format to the City.
- H. All data submittals shall include a data transmittal form indicating the manhole ID, street location, and date of the inspection.

### 3.03 DIGITAL PHOTOGRAPH VIEWS REQUIRED ▲

- A. Complete coverage shall include all surface features within 20-feet of the Work area to be used by the Contractor. Such coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, ditches, roadways, landscaping, trees, culverts, headwalls, and retaining walls, equipment, structures, pavements, manholes, vaults, handrails, etc. located within the work zone. Photographic coverage shall extend to the maximum height of all structures within this zone.
- B. The photographer shall take special efforts to point out defects in the area and internal to the manhole.
- C. All photographs shall be done during times of good visibility. No photograph shall be done during periods of visible precipitation, or when more than 10% of the ground area is covered with standing water, unless otherwise authorized by City.
- D. The Contractor shall notify the City in writing 48-hours prior to commencement of photograph documentation. The City may provide a designated representative to accompany and observe all photography. Photographs completed without a City Representative present will be unacceptable unless specifically authorized by the City.

### 3.04 DIGITAL PHOTOGRAPH REQUIREMENTS ▲

- A. Major Locations:
  1. The Contractor shall provide color digital photograph of each manhole, wet well, stormwater structure and facilities adjacent to the work before construction starts.
  2. All photographs shall be taken with character generator operating with date, time, and location on photo. All photographs shall be delivered to the City.
  2. All photographs shall maintain viewer orientation. To this end, overall establishing views of all visible house and business addresses shall be used for the area view.
  3. All photographs shall be done during time of good visibility. No photographs shall be done during precipitation, mist or fog. Photographs shall be taken when sufficient sunlight is present to properly illuminate the subjects of photos and to produce bright, sharp images of those subjects.

### 3.05 GENERAL REHABILITATION PROCEDURES

- A. All preparation, application, and finish work shall be in strict compliance with the product or system manufacturer's instructions.



- B. Manufacturer's instructions will take precedence over the requirements in this specification.
- C. Product or system applicator is required to be an approved applicator/installer from the manufacturer. Certification documentation is part of the required submittals under this section.
- D. Cleaning:
  - 1. All concrete and masonry surfaces to be rehabilitated shall be clean. All grease, oil, laitance, coatings, loose bricks, mortar, unsound brick or concrete, and other foreign materials shall be completely removed.
  - 2. Water blasting utilizing a 210°F steam unit and proper nozzles shall be the primary method of cleaning; however, other methods such as wet or dry sandblasting, acid wash, concrete cleaners, degreasers, or mechanical means may be required to properly clean the surface.
    - a. All surfaces on which these methods are used shall be thoroughly rinsed, scrubbed, and neutralized to remove cleaning agents and their reactant products. Debris resulting from cleaning shall be removed from the manhole and not discharged downstream.
  - 3. Cleaning and surface preparation will meet the above requirements unless otherwise dictated by the product or system manufacturer.
  - 4. Manufacturer's cleaning and surface preparation requirements will take precedence.
  - 5. Remove and properly dispose of all debris from cleaning and surface preparations.
    - 1. All sanitary waste may be disposed of at the City Wastewater Treatment Plant at 501 Iberia Street. There is a designated discharge point at the City's plant for such waste. All other demolition materials will become the Contactor's property and are to be legally disposed. The City will not charge for sanitary waste disposal at the designated point at the plant. ▲
- E. Stop Infiltration:
  - 1. Stop Active Leaks with patching material or infiltration control materials requirements described under paragraph 2.07.A applied according to manufacturer's instructions. Install deep weep holes as required to localize infiltration during application of patching materials. Plug weep holes after application with infiltration control material before applying liner materials.
  - 2. Severe Infiltration Control:
    - a. Severe infiltrations conditions shall be established in the approved assessment report submittal referenced in paragraph 1.13.A/B.
    - b. Exterior chemical curtain grouting shall be used to stop severe infiltrations.
    - c. Only use manufacturer recommended and approved grouting materials that meet the requirements of paragraphs 2.04 and 2.05.
    - d. Grouting shall be performed by manufacturer certified applicators and in strict accordance to their installation instructions. Refer to paragraph 3.04 for further grouting requirements.
- F. Patching:
  - 1. All large holes or voids around joints, or pipes and all spalled areas and all holes caused by missing or cracked brick shall be patched.
  - 2. All missing mortar shall be repointed using a non-shrink patching mortar.
  - 3. All cracked or disintegrated material shall be removed from the area to be patched or repointed, exposing a sound subbase.



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4. All cracks not subject to movement and greater than 1/16-inch in width shall be routed out to a minimum width and depth of 1/2-inch and patched with non-shrink rapid setting mortar suitable for exposures in Sanitary wastewater manholes meeting product requirements of article 2.06.

G. Flow Control:

1. The Contractor shall be responsible for plugging or diverting the flow of sewage as needed for approved manhole rehabilitations.

H. Inverts and benches.

1. Remove all loose grout and rubble from existing channel.
2. Rebuild channel if required by reshaping and repairing slope of shelves or benches.
3. Work shall include aligning inflow and outflow ports in such a manner as to prevent the deposition of solids at the transition point.
4. All inverts shall follow the grades of the pipe entering the manhole.
5. Changes in direction of the sewer and entering branch or branches shall have a true curve with the largest possible radius and shall be shaped to allow easy entrance of maintenance equipment including buckets or T.V. camera.

I. Lining System.

1. Each lining system shall be installed in accordance with the manufacturer's recommendation to withstand groundwater pressures.
2. For manholes greater than 12-feet in depth, the lining shall withstand the pressures associated with a groundwater depth equal to the manhole depth.
3. Linings for all other manholes shall withstand the pressures associated with groundwater depth of 12-feet.
4. Measure groundwater depth from manhole bench to top of ground surface.
5. Application of products shall be by factory/manufacturer certified applicators.
6. Spray equipment shall be specifically designed to accurately ratio and apply the lining/coating product.
7. Equipment shall be in proper working order and shall be as recommended by the product manufacturer.
8. Subsequent top coating or additional coats shall occur within the product's recoat time. Additional surface preparation procedures will be required if this recoat time is exceeded. The product manufacturer's re-coat time for the specific application, based on temperature and project conditions, and shall be strictly followed by the CONTRACTOR.
9. Edges, corners, crevices, welds, and bolts shall be given a brush coat (stripe coat) for each coating. The stripe coat shall be applied by a brush and worked in both directions. Special attention shall be given to filling all crevices with coating.

### 3.05 CHEMICAL GROUT

- A. Grouting shall be applied to a manhole for the purpose of eliminating infiltration prior to application of a lining, coating or other structural rehabilitation component.
- B. Grout types and longevity in different soil conditions must be verified through the grout manufacture.
- C. Provide 48-hour notice to the City prior to start of work for equipment testing.
- D. Prevent material from entering gravity sewer collection system.
- E. Demonstrate acceptable grout volumetric measuring technique.



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- F. Adjust chemical mixing ratios required for the specific application.
- G. Do not block pipes entering/exiting manhole with grout. Use a camera or mirror to confirm pipes are not blocked.
- H. Do not damage manhole structure during operations. Repair damage as directed by the City.
- I. Manhole Sealing: Follow ASTM F2414 and as specified herein.
- J. Brick Manholes.
  - 1. Drill grout injection holes in the manhole in strategic locations to re-direct flow coming through cracks and other defects in the wall, or to seal the entire exterior surface of the manhole, shall be in accordance with the recommendations of the grout manufacturer.
  - 2. Grout shall be injected through the drilled holes using the recommended probe and applying pressures that will effectively inject the grout but, not cause damage to the manhole structure or surrounding area.
  - 3. Injection holes shall be cleaned and patched as recommended by the manufacturer.
- K. Precast Manholes
  - 1. Seal pipe connections as specified by drilling between the pipe and manhole opening and injecting grout.
  - 2. At precast joints inject grout through holes drilled at leaking joint.
- L. Acceptance will be by visual inspection. Drips or running water will not be accepted. Damp spots will be accepted provided that if a cloth towel is rubbed on the surface there will be no transfer of water to the towel and the towel will not be damp/wet.

### 3.07 REPAIRING/REPLACING INVERT, BENCH

- A. Construct invert channels to provide a smooth flow transition waterway with no disruption of flow at pipe-manhole connections.
- B. Invert and bench to meet layout in City of St. Augustine Public Works Department applicable sanitary sewer manhole details. In form the City if existing manhole and pipe penetrations will not allow for the invert and/or bench to be replaced according to these details. The City will provide direction on how to proceed with the replacement.
- C. Materials used for repair or replacement shall be as approved in the product submittals and include the manufacturers written instructions.
- D. Preparation of the surface on which the repair or replacement is to be made is to be in accordance with the submitted and approved written instructions from the product manufacturer.

### 3.08 SPRAY APPLICATION OF THE CEMENTITIOUS MATERIAL

- A. Material hose shall be coupled to an low-velocity spray application nozzle. Pumping of the material shall commence, and the mortar shall be atomized by the introduction of air at the nozzle, creating a low-velocity spray pattern for material application.



- B. Spraying shall be performed by starting at the manhole invert and progressing up the wall to the corbel and chimney areas.
- C. Material shall be applied to a specified uniform minimum thickness no less than 2-inches. Material shall be applied to the bench area in such a manner as to provide for proper drainage without ponding.

### 3.09 SPRAY APPLIED LIGHT-WEIGHT STRUCTURAL REINFORCED CEMENT

- A. The surface prior to spraying shall be damp without noticeable free water droplets or running water.
- B. Materials shall be spray-applied to a minimum uniform thickness to ensure that all cracks, crevices, and voids are filled, and a somewhat smooth surface remains after light troweling. The light troweling is performed to compact the material into voids and to set the bond.
- C. The first application shall have begun to take an initial set (disappearance of surface sheen, which could be 15-minutes to 1-hour depending upon ambient conditions) before the second application to assure a minimum total finished thickness of 1/2-inch. The final finished thickness may need to be greater than 1/2-inch as recommended by the manufacturer to withstand groundwater pressures. A depth gauge shall be used during application, at various locations, to verify the required thickness. The surface then shall be troweled to smooth finish with care taken not to over trowel to bring additional water to the surface and weaken it. Manufacturer's recommendations shall be followed whenever more than 24-hours have elapsed between applications.
- D. The bench covers used to catch debris shall be removed and the bench and invert sprayed such that a gradual slope is produced from the walls to the invert with the thickness at the edge of the invert being no less than 1/2-inch. The wall-bench intersection shall be rounded to a uniform radius the full circumference of the intersection.
- E. No application shall be made to frozen surfaces or if freezing is expected to occur within the manhole for 24-hours after application. If ambient temperatures are in excess of 95°F, precautions shall be taken to keep the mix temperature at time of application below 90°F, using ice if necessary.
- F. The final application shall have a minimum of 4-hours cure time before being subjected to active flow.

### 3.10 CENTRIFUGAL SPIN CASTING APPLICATION OF THE CEMENTITIOUS MATERIAL:

- A. Material hose shall be coupled to a high-speed rotating applicator device. The rotating casting applicator shall then be positioned within the center of the manhole at either the top of the manhole chimney or the lowest point elevation corresponding to the junction of the manhole bench and walls.
- B. The high-speed rotating applicator shall then be initialized, and pumping of the material shall commence. As the mortar begins to be centrifugally cast evenly around the interior of the manhole, the rotating applicator head shall be raised and/or lowered at a controlled retrieval speed conducive to providing a uniform material thickness on the manhole walls.
- C. Controlled multiple passes are then made until the specified minimum finished thickness is attained. If the procedure is interrupted for any reason, simply arrest the retrieval of the applicator head until flows are recommenced.



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- D. Material thickness may be verified at any point with a depth gauge and shall be no less than a uniform 2-inches. If additional material is required at any level, the rotating applicator head shall be placed at that level and application shall recommence until that area is thickened.

### 3.11 CENTRIFUGALLY CAST STRUCTURAL REINFORCED CEMENT

- A. Application procedures shall conform to the recommendations of the manufacturer.
- B. The rotating casting applicator shall be positioned to evenly apply the material and be withdrawn at a rate to assure a final minimum thickness of 1-inch. The final finished thickness may need to be greater than 1-inch as recommended by the manufacturer to withstand groundwater pressures. A depth gauge shall be used during application, at various locations to verify the required thickness.
- C. The bench covers used to catch debris shall be removed and the bench and invert sprayed, or hand applied so that a gradual slope is produced from the walls to the invert with the thickness at the edge of the invert being no less than 1/2-inch. The wall-bench intersection shall be rounded to a uniform radius the full circumference of the intersection.
- D. No application shall be made to frozen surfaces or if freezing is expected to occur within the manhole for 24-hours after application. If ambient temperatures are in excess of 95°F, precautions shall be taken to keep the mix temperature at time of application below 90°F.
- E. The final application shall have a minimum of 1-hour cure time as recommended by the manufacturer before being subjected to active flow.

### 3.12 SPRAYED APPLIED EPOXY RESIN SYSTEM

- A. Application procedures shall conform to the recommendations of the manufacturer.
- B. The epoxy resin shall be sprayed onto the surfaces of the manhole walls, benches, and inverts to produce a smooth coating and yield the required structural integrity and corrosion resistance. A depth gauge shall be used during application at various locations to verify the required thickness.
- C. The epoxy resin shall be applied to a minimum thickness of 0.125-inches (125-mils) at the top of the manhole and gradually thickened in accordance with manufacturer's recommendations to withstand groundwater pressures. The application shall have a minimum cure time as recommended by the manufacturer before being subjected to active flow.
- D. The sloped surface of the manhole bench shall be made non-skid by broadcasting aluminum oxide or sand into the surface prior to gelatin/set.

### 3.13 MULTI-COMPONENT LINER SYSTEM

- A. Application procedures shall conform to the recommendations of the manufacturer.



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- B. The liner system shall be sprayed onto the surfaces of the manhole walls, benches, and inverts to produce a smooth surface. The spray equipment shall be specifically designed to accurately ratio and apply the liner system.
- C. Final installation shall be a minimum of 500-mils.
- D. The application shall have a minimum cure time as recommended by the manufacturer before being subjected to active flow.

### 3.14 MANHOLE LINER AND COATING REPAIR/REPLACEMENT

- A. Occasionally installation of will result in the need to repair or replace a defective Manhole Liner. The Contractor shall outline specific repair or replacement procedures for potential defects that may occur in the Manhole Liner. Repair/replacement procedures shall be accordance with the Manhole Liner manufacturer's recommendations and shall be submitted as part of the PWS.
- B. Defects in the installed Manhole Liner that will not affect the operation and long-term life of the product shall be identified and defined.
- C. Repairable defects that may occur in the installed Manhole Liner shall be specifically defined by the Contractor based on manufacturer's recommendations, including a detailed step-by-step repair procedure, resulting in a finished product meeting the requirements of these contract specifications.
- D. Un-repairable defects that may occur to the Manhole Liner shall be clearly defined by the Contractor based on the manufacturer's recommendations, including a recommended procedure for the removal and replacement of the Manhole Liner.

### 3.15 SANITARY SEWER MAIN AND LATERAL CONNECTIONS TO MANHOLES

- A. Sanitary sewer lateral connections to rehabilitated manholes shall be reinstated to provide a seamless, leak free, and unobstructed flow connection between the new manhole lining or coating system and the lateral connections.
- B. Connections are to be sealed during repairs or reconstruction of manhole base and invert.
- C. Infiltration between connecting mains, laterals and manhole invert/base/walls shall follow the requirements of paragraph 3.05.E.

### 3.16 CHIMNEY SEALS

- A. The Contractor is responsible for contacting the manufacturer for specific cure times of substrate materials prior to applying the chimney seal product.
- B. Prior to surface preparation, infiltration shall be stopped by using a material which is compatible with the repair products and is suitable for top coating with the recommended coating product. The manufacturer shall verify the product compatibility, in writing, to the City.
- C. Surface preparation by manufacturers approved method shall remove oils, grease, existing coatings, wax, loose debris, curing compounds, rust, efflorescence, sealers, salt, or other contaminants which may affect the performance and adhesion to the chimney seal to the substrate.



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- D. Application procedures shall conform to the recommendations of the product manufacturer, including environmental conditions, surface preparation, product mixing, handling, application and cure time.
- E. Chimney seals, paragraph 2.12, shall include sealing the manhole cover frame.

### 3.17 RING CASTING SEALS

- A. The Contractor shall furnish all material, equipment, tools and labor for the application of a ring casting seal to form a bond between the ring casting and grade adjustment ring or cone.
- B. Preparation and installation shall be in accordance with the manufacturer's recommendations.

### 3.18 PRECAST CONCRETE JOINT SEALS

- A. See section 2.12 for preparation, mixing, insertion and cleanout if grout is selected and approved for use.
- B. Follow the instructions of the product manufacturer for surface preparation and installation of a mechanical surface seal if selected and approved for use.

### 3.19 MANHOLE RING AND COVER

- A. Replacing manhole ring and cover.
  - 1. The manhole ring and cover shall be manufactured and installed to match the existing chimney or cone.
  - 2. The manhole casting shall be smooth, true to pattern and free from projections, sand holes or defects. The machine bearing surfaces of the frame and cover shall have even bearing.
  - 3. Mounting surfaces shall be prepared in accordance with the bedding materials manufacturer's instructions.
  - 4. The casting shall be fully bedded in mortar with adjustment brick courses placed between the frame and manhole.
  - 5. The bedding mortar shall be non-shrink and inert to corrosion deterioration.
  - 6. Top of the manhole castings located in pavement, shouldered areas and sidewalks shall be set flush with grade and in the plane of the paved surface. Top of manhole castings located outside of these areas shall be placed 2" above grade prior to sodding.

### 3.20 RAISING OF EXISTING MANHOLE FRAME AND COVER.

- A. Existing manholes that are below the grade described in article 3.19.A.6 shall be raised to meet this requirement.
- B. The exterior of the adjustment rings shall be given two coats of waterproofing material, CS-55 by Concrete Sealants, Inc. or approved equal. Do not coat the mating surfaces of the rings.
- C. Grade ring height may be a nominal 12" vertical adjustment with a maximum of 18".



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D. Bedding mortar to be in accordance with article 2.14.A.



### 3.21 INFLOW DISHES

- A. The manhole frame shall be cleaned of all dirt and debris before placing the manhole insert on the rim.
- B. The insert shall be installed in compliance with the submitted and accepted manufacturer's recommendations. The insert shall be fully seated around the manhole frame rim to prevent water from infiltrating between the cover and manhole frame rim and shall not impede the proper seating of the manhole cover.
- C. Locations where these no metallic inflow dishes are to be installed will be designated by the City.



### 3.22 MANHOLE LID SEALS

- A. Seals to be installed in accordance with the manufacturer's instructions.
- B. As a minimum the frame surfaces where the seal is to be installed are to be wire brushed in preparation to install seal.
- C. Verify lid/frame surfaces true and allow proper compression of the lid seal.

### 3.23 MANHOLE REHABILITATION ACCEPTANCE

- A. After all rehabilitation work has been completed, the manholes shall be visually inspected for leakage and tested by the Contractor as applicable to the rehabilitation's procedures applied to the respective manhole in the presence of the City and found to be acceptable.
- B. Coatings shall be free of pinholes and hollow spots/voids and other defects that will reduce the service life of the applied system. Definition of defects will be as defined by the coating manufacturer.
- C. Film thickness measurements will be based on the surface area covered and volume of coating applied. This thickness will then be verified via spark testing with the voltage setting adjusted to indicate thickness deficiencies .
- D. Holiday Detection Test (Spark Testing) to identify pinholes, thin material and any defects that will affect the life and performance of the install coating/lining if applicable.
- E. Adhesion Testing:
  - 1. A minimum of 10% of the manholes coated shall be tested for adhesion/bond of the coating to the substrate. Testing shall be conducted in accordance with ASTM D4541, ASTM D7234, or NACE SPO18. The City shall select the manholes to be tested.
  - 2. Adhesion testing does not apply to Sprayroq Spraywall lining.
- F. If properties tested do not meet minimum requirements, the system or product shall be repaired or replaced by the contractor, at no cost to the City.
- G. Photographic Inspections of post-rehabilitation condition of manhole.
  - 1. Refer to section 02764 for photographic inspection requirements.
  - 2. Submit post photographic inspections to the City within 10 calendar days.
- H. Cementitious Material Property Testing
  - 1. Applies to cementitious repairs only. The purpose of this testing is used to confirm compliance with property requirements described in the under Part 2, Products. .




2. One 2 x 2-inch sample cube shall be taken for each manhole where this material was applied. Samples shall be formed using the application method used for the rehabilitation. The sample cube will be sent to an independent testing lab approved by the City and tested for compression strength as described in ASTM C-109.
- I. Frame Sealing Test 
    1. Leakage test – Following the expansion of the lower band a quality assurance test shall be performed to ensure effective sealing by pulling the upper section of the seal or extension inward to create a recess behind the seal where water can be poured. Pour the water behind the seal and observe the lower sealing area for any visible leaks. The sealing shall be considered effective if no water leaks from behind the seal at the lower sealing area.
  - J. Visual inspection.
  - K. Cover Sealing Test
    1. The sealed manhole covers shall be visually inspected to ensure that the bearing surface was properly cleaned and that products were properly sized and installed according to the manufacturer's instructions.
    2. Water shall be poured filling the opening between the frame and cover. If the water level in the gap remains constant the seal is acceptable. If the water leaks into the manhole the seal needs to be cleaned, adjusted, or replaced. 
  - L. After the manhole rehabilitation work has been completed, the manhole shall be inspected by the Contractor in the presence of the City and the work shall be accepted if found satisfactory to the City. No evidence of visible leaks shall be allowed. Non-uniformity, sagging, lamination, holidays or other defects will be cause for rejection of the coating. All surfaces shall be tested for the presence of holidays and pinholes via spark testing at 100-volts per millimeter. The Contractor shall provide the testing equipment and perform the testing in the presence of the City. Any holidays or pinholes found during the testing shall be repaired and the surface re-tested until the surfaces are completely free of holidays and pinholes.

### 3.24 CLEANUP

- A. After the installation work has been completed and the testing is acceptable, the Contractor shall clean up the entire project area. The Contractor shall dispose of all excess material and debris. The work area shall be left in a condition equal to or better than the prior condition.

### 3.25 WARRANTY

- A. The Contractor shall guarantee materials and workmanship to be free from defects for a warranty period of 5-years from the date of final payment is approved by the City.
- B. If at any time during the warranty period any leakage, cracking, or other discontinuity is identified and is attributable to this guarantee, the Contractor shall remove and replace or repair the failed item with new material at no cost to the City. No field repair shall be approved. This defect shall be repaired or replaced within (4) weeks from the date of defect notification to the contractor at no additional cost to the City. 



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- C. The Contractor shall be responsible for all required replacement or repair costs associated with a rehabilitated item during the warranty period including all cost associated with backups, maintenance of traffic, and all other property damage.
- D. Furnish an extended warranty for manhole rehabilitation materials from the Contractor and liner manufacturer for a total of 5-years from date of final completion.
- E. Warranty Inspections
  - 1. Conduct visual inspection prior to the expiration of warranty to determine integrity of rehabilitation materials and water-tightness.
    - a. Contractor to accompany City on these inspections.
    - b. Inspect a minimum of 25% of manholes rehabilitated at locations selected by the City. If more than one manhole fails warranty inspection, inspect all manholes that had the same rehabilitation performed on the work order.
- F. All subsequent maintenance and inspections on the manholes that were rehabilitated under a respective work order shall photographically document the manhole condition before and after such work. Maintenance may include CIPP lining, cleaning, or CCTV inspections of connected mains. CIPP lining may be full segment liners or sectional main or lateral liners. The record photos will include the date and time of the work. The photo records will be made available to the Contractor upon request.

**PART 4 - METHOD OF MEASUREMENT AND PAYMENT CLARIFICATIONS:** 

4.01 Unit Pricing:

- A. Manhole & Structure Resin Based Lining unit price line items A.1 through A.8 includes light surface preparation (filling barrel joints patching a couple of bug holes and similar), and resources for application and finishing.
  - i. If the structure needs further surface preparation due to exposed wire, brick manholes, covering of an existing liner or rebuilding walls then unit price line item B.15 will apply for surface preparation.
  - ii. Unit price line item B.15 will also apply for brick manholes and rehabilitation from high H2S gas for patching and profile. Cleaning, unit price line item C.32 is not included in line items A.1 through A.12.
  - iii. These line items also include lining of the cone/corbels of manholes.
  - iv. Selection of the thickness of lining will apply where there are structural deficiencies and where there is a highwater table. The increased thickness is applied to restore the load capacity of the structure.
- B. Manhole & Structure Resin Based Lining unit price line items A.9 through A.12 apply for lining of square sanitary and stormwater structures and lining of manhole benches.
- C. Unit price line item 13 include all work required to remove lining systems in existing manholes or lift station wet wells with exception to lining covered in line item 14.
- D. Unit price line item 14 include all work required to remove T-lock, Epoxy or Polyurea type liners from existing manholes or wet wells.



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- E. Unit price line item B.16 covers chemical grout use for infiltration control. This line includes use of BASF MasterRoc polyurethane grouts.
- F. Unit price line item B.17, Sand Blasting will apply for road oil removal in stormwater structures and grease traps as well as manhole ring and cover castings.
- G. Unit price line item B.18, Bench and Invert Channel Repair. Units apply to the linear feet of the manhole diameter.
- H. Unit price line items B.18 and B.19 cover manhole chimney repairs and replacement.
- I. Unit price line item B.21 applies to manhole chimney and ring casting coating seals.
- J. Unit price line item B.22 – 25 cover replacement of manhole ring and covers.
- K. Unit price line item C.26 covers raising and leveling manhole frame and cover up to 4" in paved areas.
- L. Unit price line item C.27 covers installation of manhole cover lid and pick hole seals.
- M. Unit price line item C.28 – 31 covers providing and installing rainwater manhole cover protectors.
- N. Unit Price line items under section E will apply when there is a need to raise manhole ring and covers greater than 4" (inches).
- O. Unit price line item C.32 applies to Sanitary Manholes.
- P. Unit price line item C.33 applies to lift stations and junction boxes. The unit price**
- Q. Unit price line items C.34 and 35 document the pre-work and post work conditions.
- R. Unit price line item C.36 covers mobilization costs for manhole, lift station and storm water structures inspections.
- S. Unit price line items C.37 includes level 1 general condition assessment of a manhole. ▲
- T. Unit price line item C.38 includes level 2 detailed assessment of a manholes condition for defining recommended rehabilitations and includes 360-degree flat paper of the video.
- U. Unit price line item C.39 and 40 include all work and documentation for NASSCO level 1 and level 2 Inspections of sanitary lift station wet wells and similarly sized structures. ▲
- V. Unit price line items C.41 – 43 cover costs for cleaning sanitary manholes, stormwater structures and lift station wet wells for inspections.
- W. Unit price line item C.61 and 62 requires a floating scanner for determining surface damage inside of a Box Culvert.
- X. Unit price line item C.75 GPS mapping of manholes**
- Y. Unit price line item C.76 – C.79 includes the cost for renting pipe plugs.
- Z. Unit price line items D.82 and 83 includes necessary MOT index for a typical single lane closure, signage, flagmen and accessories for each proposed structure.
- AA. Unit price line item D.84 covers residential MOT which covers typical road work ahead signage and flagmen for needed areas. This line item may cover MOT that covers multiple structures.



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- BB. Unit price line item C.85 and 86 cover regular or emergency mobilization costs for a 4-man crew for rehabilitation work.
- CC. Unit price line item C.87 covers the per diem cost for a 4-man crew to perform rehabilitations.
- DD. Unit price line items E.88 and 89 will include invoiced services to perform bypassing functions. The services required will be covered in each proposal. Reference Section 01516 for Scope of Work.
- EE. Unit price line item E89 will include costs for provide off-duty uniformed police officers to direct and maintain traffic on FDOT and St. Johns County roads. This item is in reference to Section 01570.1.02.E. ▲
- FF. Unit price line item E93 will include costs for replacement of fencing, hedges and shrubs that were removed to facilitate the work.
- GG. Unit price line item E91 bypass plug.**
- HH. Unit price line items E.91 through 93 cost items will be pre-approved by the Work Order Manager.

END OF SECTION



## EXHIBIT B - INSURANCE REQUIREMENTS

At a minimum, Contractor shall acquire and maintain until completion of the Work the insurance coverage listed below, which constitutes primary coverage. Contractor shall not commence the Work until the City receives and approves Certificates of Insurance documenting required coverage. Contractor's General Liability policy shall include Endorsement CG 20101185, or equivalent, naming the City of St. Augustine ("City") as Additional Insured. All required policies shall include: (1) endorsement that waives any right of subrogation against the City for any policy of insurance provided under this requirement or under any state or federal worker's compensation or employer's liability act; (2) endorsement to give the City no less than thirty (30) days notice in the event of cancellation or material change. Certificates of Insurance must be accompanied by copies of the requested endorsements.

Any deductibles or self-insured retentions above \$100,000 must be declared to and approved by the City. Approval will not be unreasonably withheld. Contractor is responsible for any deductible or self-insured retention. Insurance must be placed with insurers having an A.M. Best rating of A-V or greater. City receipt of insurance certificates providing less than the required coverage does not waive these insurance requirements.

- (a) **Workers' Compensation Insurance.** Workers' compensation and employer's liability coverage, including maritime workers compensation, if applicable, in not less than the minimum limits required by Florida law. If Contractor claims an exemption from workers' compensation coverage, Contractor must provide a copy of the Certificate of Exemption from the Florida Division of Workers' Compensation for all officers or members of an LLC claiming exemption who will be participating in the Work. In addition, Contractor must provide a completed City "Affidavit (Non-Construction)" for non-construction contracts. Contractor is solely responsible for compliance with any Federal workers' compensation laws such as, but not limited to, Jones Act and USL&H Act, including any benefits available to any workers performing work on this project.
- (b) **General Liability.** Commercial General Liability Insurance on an "Occurrence Basis," with limits of liability not less than \$1,000,000/\$2,000,000, for personal injury, bodily injury, and property damage. Coverage shall include: (1) contractual liability, (2) products and completed operations, (3) independent contractors, and (4) property in the care, control, or custody of the Contractor. Extensions shall be added or exclusions deleted to provide the necessary coverage.
- (c) **Automobile Liability.** Minimum limits of \$100,000/\$300,000/\$50,000

\*\*If applicable, the following additional coverage may be required, depending upon the nature of the Work.

- (\*\*) **"Builder's Risk" Property Insurance.** Coverage amount shall be sufficient to insure the completed value of new project construction.
- (\*\*) **Maritime Workers' Compensation** insurance may be required if the work involves maritime activities, such as underwater diving, or work adjacent to navigable waters.
- (\*\*) **Watercraft Liability.** \$300,000 for bodily injury and property damage.
- (\*\*) **Pollution/Environmental Impairment Liability Coverage.** Not less than \$500,000 per occurrence and/or aggregate combined single limit, personal injury, bodily injury, and property damage.
- (\*\*) **Professional Liability.** (Per claim) \$500,000 single limits..

**EXHIBIT C – SAMPLE WORK ORDER  
WORK ORDER AUTHORIZATION**

**Contract Number:** \_\_\_\_\_ **Contract Name:** \_\_\_\_\_

**Work Order Number:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Encumbrance Number:** \_\_\_\_\_

**Work Order Amount:** \_\_\_\_\_

**To:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**From:** \_\_\_\_\_, Project Manager

**Work Order Manager:**

**Name:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Description of Work:** All work shall be accomplished in accordance with the attached Scope of Work, Exhibit "A" – Scope of Work. Invoices shall reference the Contract Number, Work Order Number and Encumbrance number; include the information required; and be submitted to the Project Manager.

**Special note:** \_\_\_\_\_

**Commencement Date:** Work is authorized to proceed on the date this Work Order is executed by the City. **Commencement of the work authorized herein prior to execution of this Work Order by Contractor constitutes acceptance of all terms and conditions of this Work Order.** Payment will not be made until this Work Order has been signed by Contractor and received by the City.

**Completion Date:** All work pursuant to this Work Order shall be completed by (Completion Date). The Completion Date, if extended pursuant to the above-referenced contract governing this Work Order, shall not be extended beyond the current City fiscal year, ending on September 30, 20 .

\_\_\_\_\_  
Department Director:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Date



**ATTACHMENT #1 - REQUIREMENTS FOR: 2 CFR PART 200 APPENDIX II****1. Equal Employment Opportunity.**

“During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency

may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.”

## **2. Davis Bacon Act and Copeland Anti-Kickback Act.**

- a. **Applicability of Davis-Bacon Act.** The Davis-Bacon Act only applies to the emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. **It does not apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program.**
- b. All prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction)). See 2 C.F.R. Part 200, Appendix II, ¶ D.
- c. In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.
- d. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.
- e. In contracts subject to the Davis-Bacon Act, the contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. §3145), as supplemented by Department of Labor regulations at 29 C.F.R. Part 3 (Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States). The Copeland Anti- Kickback Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA.
- f. The regulation at 29 C.F.R. § 5.5(a) does provide the required contract clause that applies to compliance with both the Davis-Bacon and Copeland Acts. However, as discussed in the previous subsection, the Davis-Bacon Act does not apply to Public Assistance recipients and subrecipients. **In situations where the Davis-Bacon Act does not apply, neither does the Copeland “Anti-Kickback Act.”** However, for purposes of grant programs where both clauses do apply, FEMA requires the following contract clause:

**“Compliance with the Copeland “Anti-Kickback” Act**

- (1) Contractor. The contractor shall comply with 18 U.S.C. § 874, 40U.S.C. § 3145, and the

requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

- (2) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- (2) **Breach.** A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.”

### **3. Contract Work Hours and Safety Standards Act**

#### **“Compliance with the Contract Work Hours and Safety Standards Act.**

- (1) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- (3) **Withholding for unpaid wages and liquidated damages.** The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with

the clauses set forth in paragraphs (1) through (4) of this section.”

#### **4. Rights to Inventions Made Under a Contract or Agreement.**

- a. Stafford Act Disaster Grants. This requirement **does not apply to the Public Assistance, Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program**, as FEMA awards under these programs do not meet the definition of “funding agreement.”
- b. If the FEMA award meets the definition of “funding agreement” under 37 C.F.R. § 401.2(a) and the non-Federal entity wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the non-Federal entity must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by FEMA. See 2 C.F.R. Part 200, Appendix II, ¶ F.
- c. The regulation at 37 C.F.R. § 401.2(a) currently defines “funding agreement” as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

#### **5. Clean Air Act & Federal Water Pollution Control Act**

The following provides a sample contract clause concerning compliance for contracts of amounts in excess of \$150,000:

##### Clean Air Act

- (1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- (2) The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- (3) The contractor agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.

##### Federal Water Pollution Control Act

- (1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- (2) The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- (3) The contractor agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.

## **6. Debarment and Suspension**

### **"Suspension and Debarment**

- (1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- (2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- (3) This certification is a material representation of fact relied upon by (insert name of subrecipient). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- (4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions."

## **7. Byrd Anti-Lobbying Amendment**

### **Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)**

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an

employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

\_\_\_\_\_  
Signature of Contractor's Authorized Official

---

Name and Title of Contractor's Authorized Official

---

Date

### **8. Procurement of Recovered Materials**

- a. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired—
- (1) Competitively within a timeframe providing for compliance with the contract performance schedule;
  - (2) Meeting contract performance requirements; or
  - (3) At a reasonable price.
- b. Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, <http://www.epa.gov/cpg/>. The list of EPA-designate items is available at <http://www.epa.gov/cpg/products.htm>."

### **9. Additional FEMA Requirements**

- a. The Uniform Rules authorize FEMA to require additional provisions for non- Federal entity contracts. FEMA, pursuant to this authority, requires or recommends the following:
- b. Changes.

To be eligible for FEMA assistance under the non-Federal entity's FEMA grant or cooperative agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope. FEMA recommends, therefore, that a non-Federal entity include a changes clause in its contract that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may differ depending on the nature of the contract and the end-item procured.

- c. Access to Records.

"Access to Records. The following access to records requirements apply to this contract:

- (1) The contractor agrees to provide (insert name of state agency or local or Indian tribal government), (insert name of recipient), the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which

are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

(2) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(3) The contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.”

#### **10. DHS Seal, Logo, and Flags**

- a. The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre- approval.

#### **11. Compliance with Federal Law, Regulations, and Executive Orders**

- a. This is an acknowledgement that FEMA financial assistance will be used to fund the contract only. The contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

#### **12. No Obligation by Federal Government**

- a. The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

#### **13. Program Fraud and False or Fraudulent Statements or Related Acts**

- a. The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor’s actions pertaining to this contract.



**ATTACHMENT #2 - REQUIREMENTS FOR HUD 24 CFR 85.36****1. Compliance with Clean Air Act, Clean Water Act and Environmental Protection Agency regulations**

Clean Air and Water. (Applicable to contracts in excess of \$100,000). Because of 24 CFR 85.36(i)(12) and federal law, the Design Professional shall comply with applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. § 1857h-4 transferred to 42 USC § 7607, section 508 of the Clean Water Act (33 U.S.C. § 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15), on all contracts, subcontracts, and subgrants of amounts in excess of \$100,000.

**2. Mandatory standards and policies with Energy Policy and Conservation Act**

Energy Efficiency. Pursuant to Federal regulations (24 C.F.R 85.36(i)(13)) and Federal law, except when working on an Indian housing authority Project on an Indian reservation, the Design Professional shall comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163 codified at 42 U.S.C.A. § 6321 et. seq.).

### ATTACHMENT #3 - ADDITIONAL REQUIREMENTS

#### 1. Minority Business Enterprises (MBE) and Women Business Enterprises (WBE)

I. The Sub-Recipient agrees to include in the subcontract that (i) the subcontractor is bound by the terms of this Agreement, (ii) the subcontractor is bound by all applicable state and federal laws and regulations, and (iii) the subcontractor shall hold the Division and Sub-Recipient harmless against all claims of whatever nature arising out of the subcontractor's performance of work under this Agreement, to the extent allowed and required by law.

#### II. CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS

- (a) If the Sub-Recipient, with the funds authorized by this Agreement, seeks to procure goods or services, then, in accordance with 2 C.F.R. §200.321, the Sub-Recipient shall take the following affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used whenever possible:
- i. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
  - ii. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
  - iii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
  - iv. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
  - v. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
  - vi. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (i) through (v) of this section.
- (b) The requirement outlined in subparagraph a. above, sometimes referred to as "socioeconomic contracting," does not impose an obligation to set aside either the solicitation or award of a contract to these types of firms. Rather, the requirement only imposes an obligation to carry out and document the six affirmative steps identified above.
- (c) The "socioeconomic contracting" requirement outlines the affirmative steps that the Sub-Recipient must take; the requirements do not preclude the Sub-Recipient from undertaking additional steps to involve small and minority businesses and women's business enterprises.
- (d) The requirement to divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises, does not authorize the Sub-Recipient to break a single project down into smaller components in order to circumvent the micro-purchase or small purchase thresholds so as to utilize streamlined acquisition procedures (e.g. "project splitting").

**ATTACHMENT #4 – DAVID-BACON WAGE DECISIONS**

## EXHIBIT D – UNIT PRICE SCHEDULE

Item No.	Description	Unit	Unit Price
<b>A – MANHOLE &amp; STRUCTURES COATING - POLYURETHANE</b>			
1	Manhole Protective Resin Based Lining 48" Diameter 1/8" Minimum Thickness	VF	\$328.00
2	Manhole Structural Resin Based Lining 48" Diameter 1/4" Minimum Thickness	VF	\$376.00
3	Manhole Structural Resin Based Lining 48" Diameter 1/2" Minimum Thickness	VF	\$521.00
4	Manhole Structural Resin Based Lining 48" Diameter 1" Minimum Thickness	VF	\$811.00
5	Manhole Protective Resin Based Lining 60" Diameter 1/8" Minimum Thickness	VF	\$410.00
6	Manhole Structural Resin Based Lining 60" Diameter 1/4" Minimum Thickness	VF	\$470.00
7	Manhole Structural Resin Based Lining 60" Diameter 1/2" Minimum Thickness	VF	\$651.25
8	Manhole Structural Resin Based Lining 60" Diameter 1" Minimum Thickness	VF	\$1,013.75
9	Structure / Manhole Protective Resin Based Lining 1/8" Minimum Thickness	SF	\$26.50
10	Structure / Manhole Structural Resin Based Lining 1/4" Minimum Thickness	SF	\$31.00
11	Structure / Manhole Structural Resin Based Lining 1/2" Minimum Thickness	SF	\$42.00
12	Structure / Manhole Structural Resin Based Lining 1" Minimum Thickness	SF	\$65.00
<b>B – MANHOLE &amp; STRUCTURES REPAIR</b>			
13	Removal of Existing Manhole or Wetwell Lining System (Excluding T-Lock Epoxy or Polyurea Liners)	SF	\$9.00
14	Removal of Existing Manhole or Wetwell T-Lock, Epoxy or Polyurea Liners	SF	\$22.00
15	Patching & Profiling - Cementitious Grout Only	SF	\$12.00
16	Infiltration Control - Chemical Grout	GAL	\$125.00
17	Surface Preparation - Sand Blasting	SF	\$10.00
18	Bench and Invert Channel Repair	LF	\$225.00
19	Chimney Repairs	VF	\$225.00
20	Chimney Replacement	VF	\$675.00
21	Chimney sealing (Construction Joint at Ring and Cover)	EA	\$285.00
22	Manhole Rim & Cover Replacement (STD 24" Diameter) - Paved Areas	EA	\$1,150.00
23	Manhole Rim & Cover Replacement (STD 24" Diameter) - Grassed Areas	EA	\$950.00
24	Manhole Rim & Cover Replacement (3PC COSA DETAIL SS1)- Paved Areas	EA	\$1,550.00
25	Manhole Rim & Cover Replacement (3PC COSA DETAIL SS1)- Grassed Areas	EA	\$1,250.00
26	Raise / Re-Level Existing Frame and Cover for Street Adjustment (up to 4")	EA	\$600.00
27	Provide and Install Manhole Cover lid & Pick Hole seals	EA	\$275.00
28	Install Rain Water Protector STD 24" Stainless	EA	\$365.00
29	Install Rain Water Protector Large 31.5" Stainless	EA	\$485.00
30	Install Rain Water Protector STD 24" HDPE	EA	\$135.00

31	Install Rain Water Protector Large 31.5" HDPE	EA	\$190.00
<b>C. CLEANING, TELEVISIONING AND ASSESSMENT</b>			
32	Cleaning Manholes for Rehabilitation	EA	\$150.00
33	Cleaning Structures for Rehabilitation	EA	\$1,000.00
34	Pre and Post Photographs(USB) Manholes for Rehabilitation	EA	\$150.00
35	Pre and Post Photographs(USB) Structures for Rehabilitation	EA	\$300.00
36	Mobilization (Inspection only)	WK	\$1,500.00
37	Manhole Inspection Level 1	EA	\$125.00
38	Manhole Inspection Level 2	EA	\$185.00
39	Structure (Wet Well) Inspection Level 1	EA	\$1,300.00
40	Structure (Wet Well) Inspection Level 2 (Includes scan)	EA	\$1,750.00
41	Cleaning Sewer Manholes (CCTV purposes only)	EA	\$45.00
42	Cleaning Stormwater Structures (CCTV purposes only)	EA	\$65.00
43	Cleaning Wetwells (CCTV / Inspection purposes only)	EA	\$600.00
44	Light Storm Drain Cleaning From ROW (Right of way) 8"-10"	LF	\$4.75
45	Light Storm Drain Cleaning From ROW (Right of way) 12"-15"	LF	\$8.25
46	Light Storm Drain Cleaning From ROW (Right of way) 16"-24"	LF	\$12.25
47	Light Storm Drain Cleaning From ROW (Right of way) 30"-36"	LF	\$29.00
48	Light Storm Drain Cleaning From Side and Rear Easements 8"-10"	LF	\$9.40
49	Light Storm Drain Cleaning From Side and Rear Easements 12"-15"	LF	\$16.40
50	Light Storm Drain Cleaning From Side and Rear Easements 16"-24"	LF	\$24.75
51	Light Storm Drain Cleaning From Side and Rear Easements 30"-36"	LF	\$58.50
52	Increase for "Medium" cleaning of storm drain to above line items 44-51	LF	\$1.75
53	Increase for "Heavy" cleaning of storm drain to above line items 44-51	LF	\$3.50
54	Storm Drain CCTV 8" - 10"	LF	\$3.75
55	Storm Drain CCTV 12" - 18"	LF	\$3.75
56	Storm Drain CCTV 18 - 24"	LF	\$3.75
57	Storm Drain CCTV 24" - 30"	LF	\$3.75
58	Storm Drain CCTV 30" - 42"	LF	\$3.75
59	Storm Drain CCTV 42" - 54"	LF	\$3.75
60	Storm Drain CCTV 54" - 66"	LF	\$3.75
61	Box Culvert Top Scan	LF	\$10.50
62	Box Culvert Bottom Debris Mapping scan	LF	\$5.50
63	CCTV Sanitary pipe inspection - includes light cleaning 8"-10" Diameter	LF	\$3.00
64	CCTV Sanitary pipe inspection - includes light cleaning 12"-15" Diameter	LF	\$3.25
65	CCTV Sanitary pipe inspection - includes light cleaning 16"-24" Diameter	LF	\$6.50
66	Dye Testing of Sewer	EA	\$850.00
67	Dye Flooding of Sewer	EA	\$1,250.00
68	Wastewater Flow Monitoring Equipment Rental and Installation in existing Structures	EA	\$2,750.00
69	Wastewater Flow Monitoring Monitoring and Maintenance	EA / Month	\$650.00

70	Rainfall Monitoring Equipment Rental and Installation in existing Structures	EA	\$850.00
71	Rainfall Monitoring Monitoring and Maintenance	EA / Month	\$300.00
72	Line cleaning / Jetting for Sanitary	LF	\$3.25
73	Increase for "Medium" cleaning of sanitary sewer line, ADD to above line item 72	LF	\$1.25
74	Increase for "Heavy" cleaning of sanitary sewer line, ADD to above line item 72	LF	\$2.50
75	GPS Mapping of Requested Manholes	EA	\$150.00
<b>D – ANCILLARY SERVICES</b>			
76	Plug Rental 6" - 10"	DAY	\$125.00
77	Plug Rental 10" - 16"	DAY	\$150.00
78	Plug Rental 16" - 24"	DAY	\$200.00
79	Plug Rental 24" - 36"	DAY	\$250.00
80	Bypass Pumper Truck	HOUR	\$325.00
81	Bypass Vac-Truck	HOUR	\$325.00
82	Maintenance of Traffic (MOT) -Arterial (single lane closure)	EA	\$1,250.00
83	Maintenance of Traffic (MOT) - FDOT (single lane closure)	EA	\$1,500.00
84	Maintenance of Traffic (MOT) - Neighborhood (Simple MOT including Flagmen)	EA	\$600.00
85	Mobilization Standard (per Crew)	WK	\$2,450.00
86	Mobilization Emergency (per crew)	EA	\$3,750.00
87	Meals/Hotel/Lodging (per crew)	DAY	\$600.00
<b>E – COST OF INVOICE PLUS OH/P ON MISCELLANEOUS SERVICES. City to authorize use of these items</b>			
88	Bypass Pumping Services		<b>15% OH/P</b>
89	Maintenance of Traffic CUSTOM INDEX		<b>15% OH/P</b>
90	Bypassing Plug (HAVE TO ORDER)		<b>15% OH/P</b>
91	Miscellaneous / Unexpected Materials or Services		<b>15% OH/P</b>
92	Extra / Miscellaneous		<b>15% OH/P</b>
93	Extra / Miscellaneous		<b>15% OH/P</b>
<b>BOND AMOUNT</b>			
94	Bond amount calculated at 3% of total bid Price 1	<b>3%</b>	

**CONFORMED 09-16-2020**



## City of Bunnell, Florida

### Agenda Item No. E.1.

Document Date: 7/10/2023 Amount:  
Department: Community Development Account #:  
Subject: Ordinance 2023-13 Requesting the voluntary contraction of the City's  
Boundary for 42.6+/- acres of property located north of the intersection  
between State Hwy 11 and County Road 304 - Second Reading  
Agenda Section: Ordinances: (Legislative):

#### ATTACHMENTS:

Description	Type
Ordinance 2023-13 Palmer Contraction	Ordinance
Feasibility Study	Exhibit

#### Summary/Highlights:

This is a request by Clinton and Kathryn Palmer for the voluntary contraction of the City's Boundary for 42.6+/- acres of property located north of the intersection between State Highway 11 and County Road 304.

The two pieces of property that are included in this request can be identified by the following Parcel ID numbers assigned by the Flagler County Property Appraiser's Office:

- 19-13-30-1650-01060-0020 (8775 State Hwy 11)
- 19-13-30-1650-01060-0050

Written notice was provided to Flagler County Board of Commissioners regarding this voluntary contraction on May 24, 2023.

This matter was last heard at the June 26, 2023 City Commission Meeting for First Reading. At this meeting, the City Commission voted to continue the matter to allow staff time to discuss newly discovered issues with the property owner/applicant.

Staff met with the applicants on June 27, 2023 to discuss the properties.

As this is a quasi judicial matter, if a member of the Commission has had any contact with the applicant or another person other than staff about this matter outside of a Commission meeting, they will need to disclose any of those ex parte communications following the reading of the short title.

This proposed Ordinance was last heard at the July 10, 2023 City Commission Meeting. At this meeting, the City Commission voted to approve the proposed Ordinance. In accordance with

Florida Statute, this Ordinance was advertised in the Palm Coast Observer on July 13, 2023 and July 20, 2023.

**Background:**

The applicants, Clinton and Kathryn Palmer, own both parcels of land located within the City of Bunnell. The Palmers have petitioned the City of Bunnell to de-annex these properties from its corporate limits under the reason that City services are not provided to these two parcels. Under Chapter 171.052, Florida Statutes, only land that does not meet the criteria for annexation in F.S. 171.043 can be excluded from municipal boundaries. A feasibility study is required to be performed and has been submitted by the applicant. The study found that this property is eligible for de-annexation based on the criteria for municipal contraction set forth in Chapter 171.052 of the Florida Statutes.

Contrary to the reason of the applicant's request, the only City services not provided to these parcels are water and sewer; these services were not available when the applicant obtained their building permit for the house they built on the property. Solid Waste services are available to all properties within the City of Bunnell limits, including the one in this request. Community Development services, such as permitting, plan review, and inspections, are available to these parcels upon application submittals to the Department of Community Development.

**Staff Recommendation:**

Adopt Ordinance 2023-13 Requesting the voluntary contraction of the City's Boundary for 42.6+/- acres of property located north of the intersection between State Hwy 11 and County Road 304 -  
Second Reading

**City Attorney Review:**

Approved.

**Finance Department Review/Recommendation:**

**City Manager Review/Recommendation:**

Approved.



## ORDINANCE 2023-13

**AN ORDINANCE OF THE CITY OF BUNNELL, FLORIDA FOR THE VOLUNTARY CONTRACTION (DEANNEXATION) OF THE CITY BOUNDARY BY DEANNEXING 42.6+/- ACRES MORE OR LESS OF REAL PROPERTY, GENERALLY LOCATED NORTH OF INTERSECTION COUNTY ROAD 304 AND STATE HIGHWAY 11, MORE PARTICULARLY AND LEGALLY DESCRIBED ON EXHIBIT A, ATTACHED HERETO AND FULLY INCORPORATED HEREIN BY THIS REFERENCE; PROVIDING FOR THE AMENDMENT OF CITY BOUNDARIES TO CONTRACT THE SUBJECT PROPERTIES FROM THE CITY BOUNDARIES; PROVIDING FOR REPEAL OF PRIOR INCONSISTENT ORDINANCES AND RESOLUTIONS, SEVERABILITY, AND AN EFFECTIVE DATE.**

**WHEREAS**, Chapter 171, *Florida Statutes*, provides the exclusive method of municipal annexation or contraction in order to ensure sound urban development and efficient provision of urban services; and

**WHEREAS**, Clinton and Kathryn Palmer own two parcels which are the subject of this ordinance, identified by Flagler County Tax Parcel ID Numbers: 19-13-30-1650-01060-0020 and 19-13-30-1650-01060-0050 collectively totaling approximately 42.6+/- acres, such property described in Exhibit A and illustrated in Exhibit B, and incorporated herein by reference is contiguous to the corporate limits of the City of Bunnell; and

**WHEREAS**, the owners have requested that the City deannex these parcels; and

**WHEREAS**, these parcels fail to meet all of the criteria of Chapter 171.043, F.S., specifying the character of an area that may be annexed upon the proposal of a municipality; and

**WHEREAS**, this parcel has not been developed for urban purposes; and

**WHEREAS**, the contraction of this parcel will not result in a portion of the City becoming noncontiguous with the rest of the municipality; and

**WHEREAS**, upon adoption of this Ordinance, the municipal boundary lines of the City of Bunnell shall be redefined to exclude the subject real properties.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF BUNNELL, FLORIDA:**

### **Section 1. Recitals.**

The foregoing recitals are true and correct and are fully incorporated herein by this reference.

**Section 2. Contraction of Subject Properties.**

The Subject Properties as illustrated in Exhibit "B" shall be, and are hereby deannexed from the City of Bunnell, Florida. These properties are described in Exhibit "A" and illustrated in Exhibit "B". The Subject Properties shall be excluded from the existing boundaries of the City of Bunnell, Florida, from the effective date of this Ordinance.

**Section 3. City Boundaries Redefined.**

(a) within seven (7) days of the adoption of this Ordinance, the City Clerk shall file a copy of said Ordinance with the Clerk of the Court (Land Records/Recording), with the Chief Administrative Officer of Flagler County (the County Administrator), with the Florida Department of State, and with such other agencies and entities as may be required by law or otherwise desirable.

(b) The City Manager, or designees within City management staff, shall ensure that the properties contracted/de-annexed by this Ordinance are removed from the *City of Bunnell Comprehensive Plan*, the Official Zoning Map of the City of Bunnell and the map of the City Limits of the City of Bunnell in an expeditious manner.

(c) The City Manager, or designees, are hereby authorized and directed to legally describe and map the revised City Limits of the City of Bunnell and to take any and all appropriate actions or propose actions to the City Commission as may be authorized in accordance with controlling law.

**Section 4. Repeal of Prior Inconsistent Ordinances and Resolutions.**

All ordinances and resolutions or parts of ordinances and resolutions in conflict herewith are hereby repealed to the extent of the conflict.

**Section 5. Severability.**

If any section, subsection, sentence, clause, phrase, word or provision of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, whether for substantive, procedural, or any other reason, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions of this Ordinance.

**Section 6. Effective Date.**

This Ordinance shall take effect immediately upon adoption.

First Reading: approved on this 10<sup>th</sup> day of July 2023

Second Reading/Final Reading: adopted on this 24<sup>th</sup> day of July 2023.

**CITY COMMISSION, City of Bunnell, Florida.**

By: \_\_\_\_\_  
Catherine D. Robinson, Mayor

Approved for form and content by:

\_\_\_\_\_  
Vose Law Firm, City Attorney

Attest:

Seal: \_\_\_\_\_  
Kristen Bates, CMC, City Clerk

**Exhibit "A"**  
**Legal Description**

Parcel #1 (Parcel ID: 19-13-30-1650-01060-0020)

A PARCEL OF LAND LYING IN SECTION 19, TOWNSHIP 13 SOUTH, RANGE 30 EAST, FLAGLER COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FROM A POINT OF REFERENCE BEING THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 19, BEAR N87°45'20"E ALONG THE SOUTH LINE OF SECTION 19 A DISTANCE OF 111.10 FEET TO ITS INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY OF STATE ROAD NO. 11; THENCE N01°28'21"W ALONG SAID EASTERLY RIGHT-OF-WAY A DISTANCE OF 902.99 FEET TO THE NORTHEAST CORNER OF LANDS DESCRIBED IN O.R. BOOK 2492, PAGE 1443 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE DEPARTING SAID EASTERLY RIGHT-OF-WAY N88°38'49"E A DISTANCE OF 179.39 FEET; THENCE S02°00'17"E A DISTANCE OF 10.58 FEET; THENCE N89°19'16"E A DISTANCE OF 2000.00 FEET; THENCE N47°41'21"W A DISTANCE OF 1874.48 FEET; THENCE S01°28'21"W ALONG A LINE 826.00 FEET EASTERLY OF AND PARALLEL TO SAID EASTERLY RIGH-OF-WAY A DISTANCE OF 660.08 FEET; THENCE S88°38'49"W A DISTANCE OF 826.00 FEET TO THE EASTERLY RIGHT-OF-WAY OF STATE ROAD NO. 11; THENCE S01°28'21"E ALONG SAID EASTERLY RIGHT-OF-WAY A DISTANCE OF 600.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

PARCEL CONTAINS 31.45 ACRES MORE OR LESS.

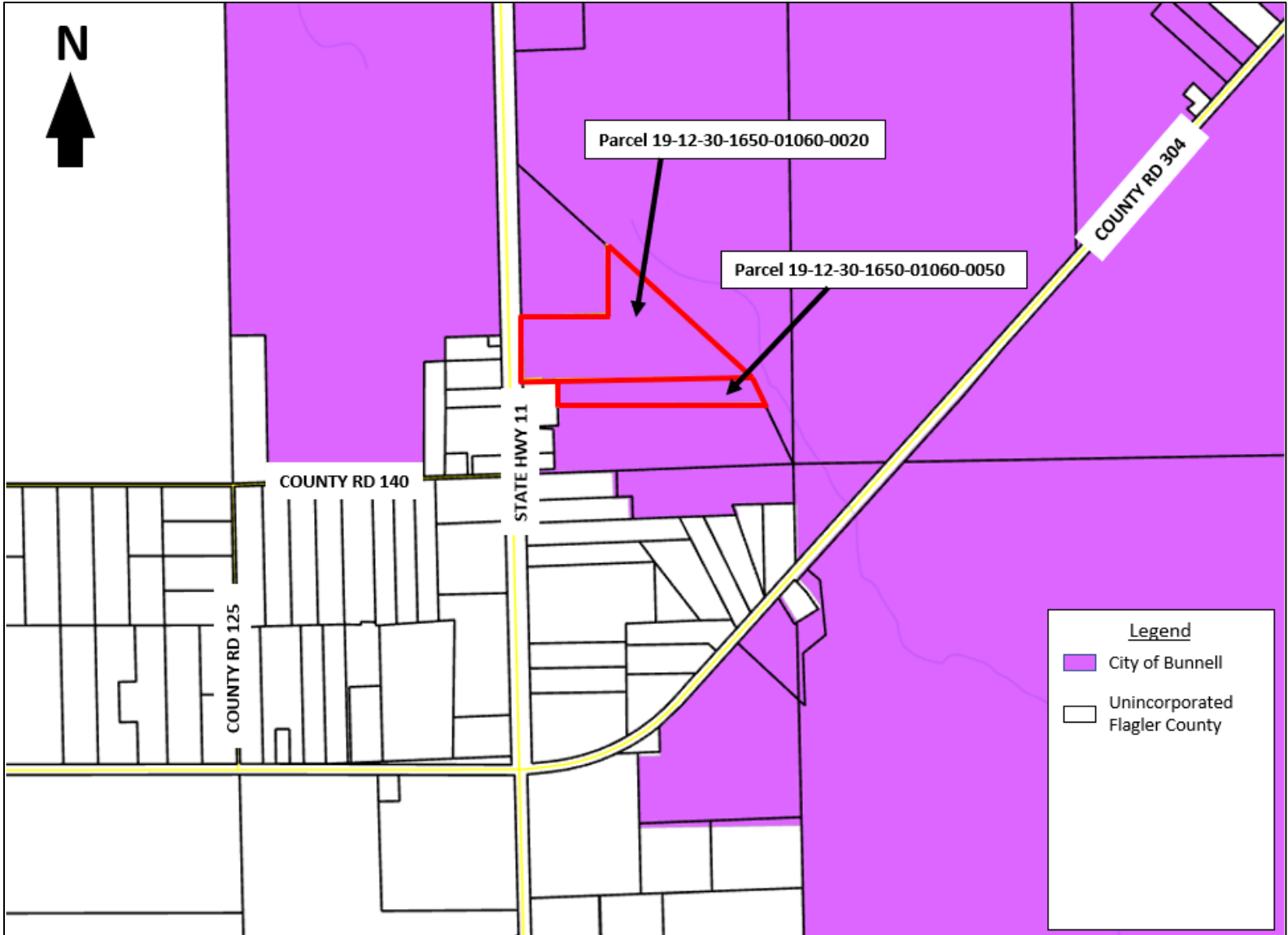
Parcel #2 (Parcel ID: 19-13-30-1650-01060-0050)

A PARCEL OF LAND LYING IN SECTION 19, TOWNSHIP 13 SOUTH, RANGE 30 EAST, FLAGLER COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FROM A POINT OF COMMENCEMENT BEING THE SOUTHEAST CORNER OF SAID SECTION 19, BEAR N25°34'00"W A DISTANCE OF 633.58 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N25°34'00W A DISTANCE OF 275.59 FEET; THENCE S89°19'16"W A DISTANCE OF 1854.82 FEET TO THE NORTHEAST CORNER OF LANDS DESCRIBED IN O.R. BOOK 2492, PAGE 1443; THENCE S01°33'19"E ALONG THE EAST LINE OF SAID LANDS DESCRIBED IN O.R. BOOK 2492, PAGE 1443 A DISTANCE OF 250.03 FEET; THENCE DEPARTING SAID EAST LINE N89°19'16"E A DISTANCE OF 1966.98 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

PARCEL CONTAINS 10.97 ACRES MORE OR LESS.

**Exhibit "B"**  
Contraction Map



**To:** Bernadette Fisher  
Director of Community Development

**From:** Mark P, Karet, AICP  
Director of Planning and Landscape Architecture

**Date:** May 2, 2023

**Subject:** Feasibility Study Proposed Municipal Contraction  
Parcel IDs: 19-13-30-1650-01060-0020 & 19-13-30-1650-01060-0050  
Clinton and Kathryn Palmer Parcels

**Background:**

The subject property is identified as Parcel ID numbers: 19-13-30-1650-01060-0020 & 19-13-30-1650-01060-0050. Parcel 19-13-30-1650-01060-0020 is owned by Clinton & Kathryn Palmer. Parcel 19-13-30-1650-01060-0050 is owned by Clinton Palmer. Parcel 19-13-30-1650-01060-0020 is 31.6± acres in size. It is addressed as 8775 State Highway 11. It contains a recently constructed single-family residence, horse barn, and equipment storage building. Three people reside on the property. Parcel 19-13-30-1650-01060-0050 is 10.98± acres in size and is an adjacent parcel of land that has not been assigned a street address. There are no physical improvements on Parcel 19-13-30-1650-01060-0050.

The lands surrounding the subject property is a rural area. It is a sparsely developed area with a very low population density below 100 people per square mile. North and west of the subject property is Middle Haw Creek. Middle Haw Creek is a large blackwater stream that is surrounded by a dense natural floodplain forest. South and west of the subject property are lands used for agricultural purposes and rural residential development. See the attached aerial location map which shows the subject property and its surrounding rural area.

Clinton and Kathryn Palmer have filed a petition to de-annex the Subject Property from the City of Bunnell and have commissioned this analysis at your request.

This report analyzes the feasibility of contracting the subject property from the municipal boundaries of the City of Bunnell consistent with *Chapter 171.052, F.S. Criteria for contraction of municipal boundaries*. Chapter 171.052, F.S. states that (1) “Only those areas which do not meet the criteria for annexation in s. 171.043 may be proposed for exclusion by municipal governing bodies...”. Under Chapter 171.043, F.S., areas may be annexed only if lands are: (1) contiguous to the municipality’s boundaries per Chapter 171.043 (1), F.S., and (2) meets the requirements of either Chapter 171.043(2) or Chapter 171.043 (3).

**Analysis:**

**Criteria:** Chapter 171.043(1) requires that the total area to be annexed must be contiguous to the municipality's boundaries at the time the annexation proceeding is begun and reasonably compact. No part of the area to be annexed shall be included within the boundary of another incorporated municipality.

**Findings:** The Subject Property meets this criterion for areas to be annexed. It is contiguous to other lands that are incorporated into the City of Bunnell so that a substantial portion of the subject property's boundary is coterminous with the boundary of the City.

**Criteria:** Chapter 171.043(2) requires that the area to be annexed must be developed for urban purposes which is defined as a developed area that meets any of the following:

- (a) A total resident population equal to at least two persons for each acre of land; or*
- (b) A total resident population that equals at least one person for each acre of land and is subdivided into lots and tracts so that at least 60 percent of total number of lots and tracts are 1 acre or less in size; or*
- (c) Is developed with at least 60 percent of total number of lots and tracts in area at the time of annexation that are used for urban purposes and is subdivided into lots and tracts so that at least 60 percent of the total acreage, not counting the acreage used at the time of annexation for nonresidential urban purposes, consists of lots and tracts 5 acres or less in size.*

**Findings:** The proposed contraction area fails to meet the three criteria in Chapter 171.043(2) since the Subject Property has a population density of less than 1 person per acre, is not divided into parcels of less than 1 acres in size and each parcel is substantially larger than 5 acres. No part of the subject property is used for urban purposes.

**Criteria:** Chapter 171.043(3) states that in addition to being developed for urban purpose, an area may be included in the land to be annexed any additional area which does not meet the requirements of subsection (2), if the area either:

- (a) lies between the municipal boundary and an area developed for urban purposes, so that the area developed for urban purposes is either not adjacent to the municipal boundary or cannot be served by the municipality without extending services or water or sewer lines through such sparsely developed area; or*
- (b) is adjacent, on at least 60 percent of its external boundary, to any combination of the municipal boundary and the boundary of an area or areas developed for urban purposes as defined in subsection (2).*

**Findings:** The proposed contraction area fails to meet Criteria 171.043(3) since the Subject Property does not lie between Bunnell's municipal boundary and an area developed for urban purposes nor is any

part of the subject property adjacent to lands used for urban purposes as defined in Chapter 171.043(2), F.S.

**Criteria:** Chapter 171.052 states that if area proposed to be excluded does not meet the criteria of s. 171.043, but such exclusion would result in a portion of the municipality becoming noncontiguous with the rest of the municipality, then such exclusion shall not be allowed.

**Findings:** Contraction of the Subject Property would not separate the City of Bunnell from any of its remaining corporate limits. See the attached map which depicts the location of the property in relation to Bunnell's municipal boundary. The proposed contraction does not create any noncontiguous areas within the city.

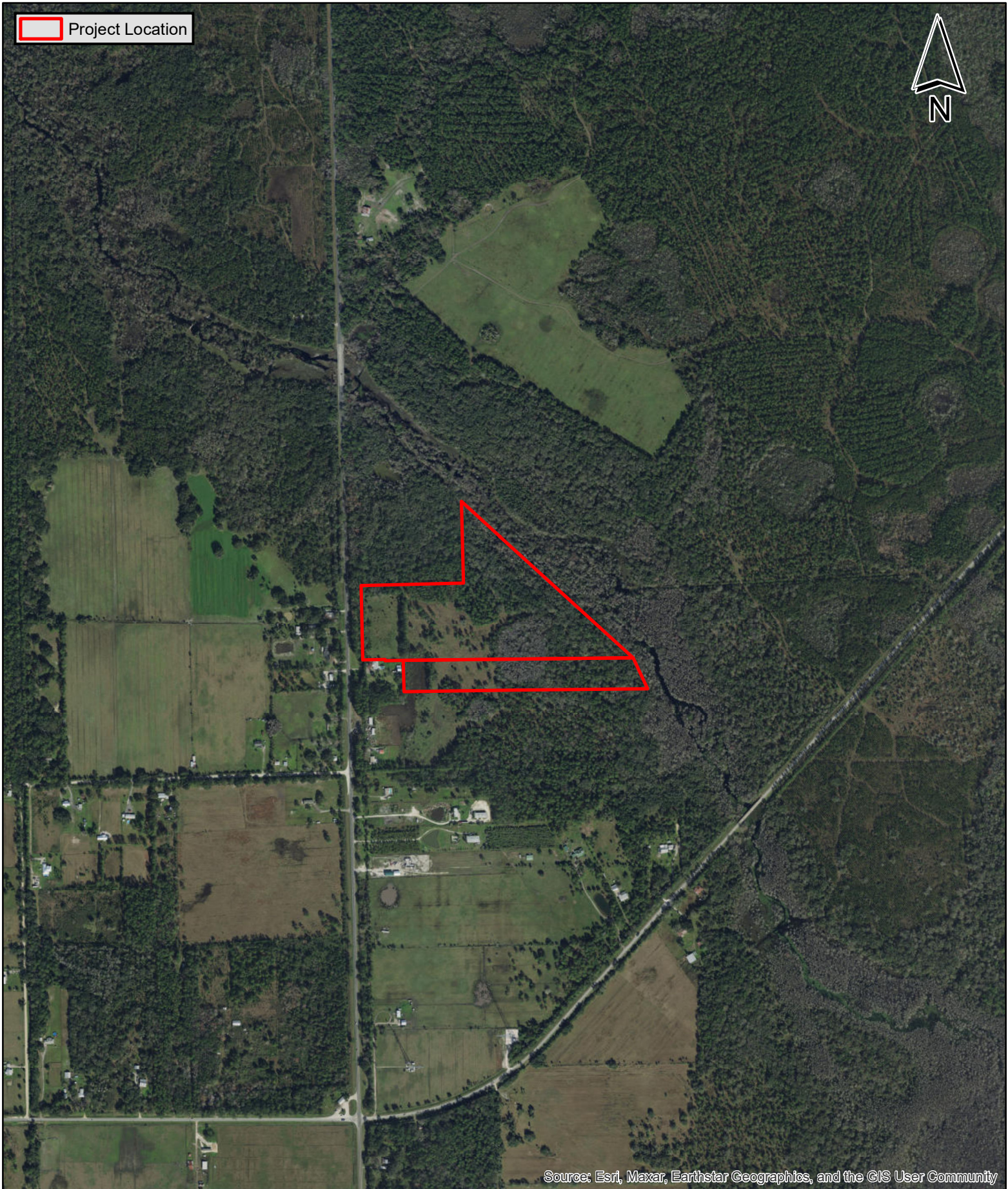
**Conclusion:**

The proposed contraction of the Subject Property meets the criteria established by Chapter 171.052 F.S. for contraction of municipal boundaries since the subject property fails to meet the criteria for annexation in s. 171.043. The Subject Property fails to meet criteria outlined in Chapter 171.043(2) or Chapter 171.043 (3). Finally, contraction of the Subject Property would not result in the creation of noncontiguous areas within the boundaries of the City.

Excluding the subject property from the corporate limits of the City of Bunnell is feasible based on the findings above. The proposed contraction will have no impact on the City's provision of services to or connection with any urban area as defined by Florida Statutes.



 Project Location



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community


Info:

Date Saved: 4/25/2023 Created by: planigan  
Path: Z:\PROJECTS\2023\23118 - Flagler DeAnnexation Parcels\Location Map.mxd


1,000 500 0 1,000 Feet


# Location Map Palmer Parcels City of Bunnell, Florida

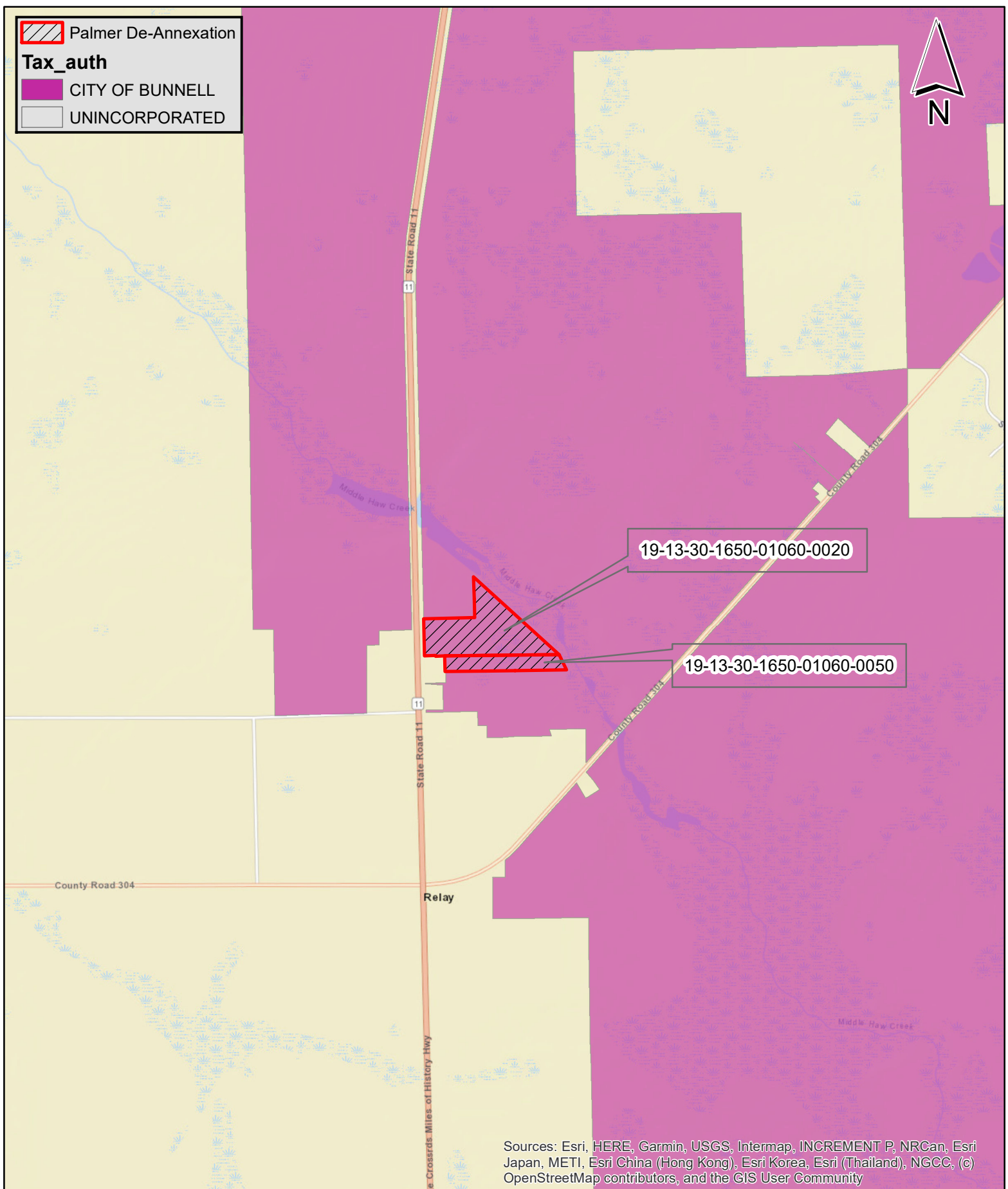
 **ZEV COHEN**  
& ASSOCIATES INC  
300 Interchange Blvd  
Ormond Beach, FL 32174  
ph 386-677-2482

 Palmer De-Annexation

**Tax\_auth**

 CITY OF BUNNELL

 UNINCORPORATED



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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# De-Annexation Palmer Parcels

## City of Bunnell, Florida



**ZEV COHEN**  
 & ASSOCIATES, INC.  
 300 Interchange Blvd  
 Ormond Beach, FL 32174  
 ph 386-677-2482



## City of Bunnell, Florida

### Agenda Item No. E.2.

Document Date: 7/10/2023 Amount:  
Department: Community Development Account #:  
Subject: Ordinance 2023-14 Requesting to voluntarily annex property totaling 0.51 +/- acres of land, owned by Coastal Collections LLC, located at 1138 County Road 305. - Second Reading  
Agenda Section: Ordinances: (Legislative):

#### ATTACHMENTS:

Description	Type
Ordinance 2023-14 Coastal Collections LLC Voluntary Annexation	Ordinance
Location Map	Location Map(s)

#### Summary/Highlights:

This is a request by the applicant, Charlie Faulkner with Faulkner & Associates Inc on behalf of the property owner Coastal Collections LLC, to voluntarily annex property totaling 0.51 +/- acres located at 1138 County Road 305. The property is identified by Parcel ID: 13-12-28-1800-01280-0350 by the Flagler County Property Appraiser's Office.

In accordance with Florida Statutes, the written notice to the Flagler County Board of County Commissioners was provided on June 9, 2023.

This matter was last heard at the July 10, 2023 City Commission meeting. At this meeting, the Commission voted to approve the proposed Ordinance. In accordance with Florida Statute, this Ordinance was advertised in the July 13, 2023 and July 20, 2023 editions of the Palm Coast Observer.

#### Background:

The property owner, Coastal Collections LLC, owns the subject property that totals 0.51 +/- acres located in unincorporated Flagler County. The applicant has petitioned for voluntary annexation into the City of Bunnell. The property is currently vacant. The owner plans to construct a 3,200 square foot commercial retail building.

The property has a Flagler County Future Land Use Map designation of "Mixed Use: Low Intensity" and a Flagler County zoning classification of "C-1, Neighborhood Commercial." The applicant is currently seeking to change both designations to City of Bunnell designations.

Section 171.044 of the Florida Statutes contains specific requirements that govern the process of voluntary annexation. The City is required to provide notice to the County Administrator on behalf of the County Commission. The statute prohibits voluntary annexation if the annexation will result in the creation of an enclave of unincorporated county land completely surrounded by a municipality.

Voluntary annexations must be contiguous and reasonably compact. Per Section 171.031, Florida Statutes, contiguous means that a substantial part of a boundary of the property to be annexed is coterminous with a part of the boundary of the municipality. Compactness is defined as "the concentration of a piece of property in a single area precluding any action which creates enclaves, pockets, or finger areas in serpentine patterns".

The subject property is contiguous, and the boundary of the property is coterminous with the City's corporate limits on its western boundary. The subject property is compact, and the action of annexation will not create a county enclave.

**Staff Recommendation:**

Adopt Ordinance 2023-14 Requesting to voluntarily annex a 0.51+/- acre parcel of land, owned by Coastal Collections LLC, located at 1138 County Road 305. - Second Reading.

**City Attorney Review:**

Approved

**Finance Department Review/Recommendation:**

**City Manager Review/Recommendation:**

Approved for Agenda

**ORDINANCE 2023-14**

**AN ORDINANCE OF THE CITY OF BUNNELL, FLORIDA, ANNEXING BY VOLUNTARY PETITION CERTAIN REAL PROPERTY TOTALING 0.51± ACRES, OWNED BY COASTAL COLLECTIONS LLC, LOCATED AT 1138 COUNTY ROAD 305 WHICH IS CONTIGUOUS TO THE CITY OF BUNNELL IN ACCORDANCE WITH THE VOLUNTARY ANNEXATION PROVISIONS OF SECTION 171.044, *FLORIDA STATUTES*, AND OTHER CONTROLLING LAW; REDFINING THE BOUNDARIES OF THE CITY OF BUNNELL TO INCLUDE SAID PROPERTY; PROVIDING FOR FINDINGS; PROVIDING FOR CONDITIONS; DIRECTING THE CITY CLERK TO RECORD THE ORDINANCE WITH THE CLERK OF THE CIRCUIT COURT, WITH THE CHIEF ADMINISTRATIVE OFFICE OF FLAGLER COUNTY AND WITH THE DEPARTMENT OF STATE; PROVIDING FOR LEGAL DESCRIPTION AND A MAP; REPEALING ALL ORDINANCES IN CONFLICT HEREWITH; PROVIDING FOR SEVERABILITY; PROVIDING FOR NON-CODIFICATION AND THE TAKING OF ADMINISTRATIVE ACTIONS AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, Coastal Collections LLC is hereby determined to be the owner of the real property described below; and

**WHEREAS**, Coastal Collections LLC petitioned, pursuant to Section 171.044, *Florida Statutes*, for voluntary annexation of said property into the municipal limits of the City of Bunnell which totals approximately 0.51+/- acres in size and is located at 1138 County Road 305; and

**WHEREAS**, Coastal Collections LLC is the owner of the property being described by Tax Identification Parcel Number as follows:

<b>Tax Identification Parcel Number</b>	<b>Owner</b>
13-12-28-1800-01280-0350	Coastal Collections LLC

**WHEREAS**, City staff on May 25, 2023, have reviewed and recommended approval of the annexation of said properties to the City Commission of the City of Bunnell and has accomplished all actions required under the *Code of Ordinances of the City of Bunnell* and State law; and

**WHEREAS**, the City Commission, upon the recommendation of City staff and the City Attorney, has determined that the property which is proposed to be annexed into the City of Bunnell is within an unincorporated area of Flagler County, is reasonably

compact and contiguous to the corporate areas of the City of Bunnell, Florida and it is further determined that the annexation of said property will not result in the creation of any enclave, and it is further determined that the property otherwise fully complies with the requirements of State law; and

**WHEREAS**, the City Commission of the City of Bunnell, Florida has taken all actions in accordance with the requirements and procedures mandated by State law; and

**WHEREAS**, the City Commission of the City of Bunnell, Florida hereby determines that it is to the advantage of the City of Bunnell and in the best interests of the citizens of the City of Bunnell to annex the afore described property; and

**WHEREAS**, the provisions of Section 166.031(3), *Florida Statutes*, provide that a municipality may, by ordinance and without referendum, redefine its boundaries to include only those lands previously annexed and shall file said redefinition with the Florida Department of State; and

**WHEREAS**, the provisions of Section 171.091, *Florida Statutes*, provide as follows: Recording – Any change in the municipal boundaries through annexation or contraction shall revise the charter boundary article and shall be filed as a revision of the charter with the Department of State within 30 days. A copy of such revision must be submitted to the Office of Economic and Demographic Research along with a statement specifying the population census effect and the affected land area; and

**WHEREAS**, the metes and bounds legal descriptions and the map attached hereto Exhibits “A” and “B” shows, describes, and depicts the property which is hereby annexed into the City of Bunnell.

**NOW, THEREFORE, BE IT ENACTED BY THE CITY COMMISSION OF THE CITY OF BUNNELL, FLORIDA, AS FOLLOWS:**

**Section 1. Legislative and Administrative Findings/Annexation of Property.**

(a) The recitals set forth above in the “whereas clauses” are hereby adopted as legislative findings of the City Commission of the City of Bunnell.

(b) The property that is the subject of this Ordinance consists of the following parcel of land assigned the Tax Identification Parcel Number set forth above and being specifically described in Exhibits “A” and “B”, said property being situated in Flagler County, Florida, and said property are hereby annexed into and are hereby made a part of the City of Bunnell, Florida pursuant to the voluntary annexation provisions of Section 171.044, *Florida Statutes*, and other controlling law.

**Section 2. Effect of Annexation.**

Upon this Ordinance becoming effective, the property owners of the said property shall be entitled to all the rights and privileges and immunities as are from time-to-time granted to property owners of the City of Bunnell, Florida as further provided in Chapter 171, *Florida Statutes*, and shall further be subject to the responsibilities of ownership as may from time-to-time be determined by the governing authority of the City of Bunnell, Florida and the provisions of said Chapter 171, *Florida Statutes*.

**Section 3. Administrative Actions.**

(a) Within seven (7) days of the adoption of this Ordinance, the City Clerk shall file a copy of said Ordinance with the Clerk of the Court (Land Records/Recording), with the Chief Administrative Officer of Flagler County (the County Manager), with the Florida Department of State, and with such other agencies and entities as may be required by law or otherwise desirable.

(b) The City Manager, or designees within City management staff, shall ensure that the property annexed by this Ordinance are incorporated into the *City of Bunnell Comprehensive Plan*, the Official Zoning Map of the City of Bunnell in an expeditious manner and the map of the City Limits of the City of Bunnell.

(c) The City Manager, or designees, are hereby authorized and directed to legally describe and map the existing City Limits of the City of Bunnell and to take any and all appropriate actions or propose actions to the City Commission as may be authorized in accordance with controlling law.

**Section 4. Conflicts.**

All ordinances or part of ordinances in conflict with this Ordinance are hereby repealed.

**Section 5. Severability.**

If any section, sentence, phrase, word, or portion of this Ordinance is determined to be invalid, unlawful or unconstitutional, said determination shall not be held to invalidate or impair the validity, force or effect of any other section, sentence, phrase, word, or portion of this Ordinance not otherwise to be invalid, unlawful, or unconstitutional.

**Section 6. Codification.**

The provisions of this Ordinance shall not be codified, but the annexed property shall be incorporated and included in all appropriate maps of the City Limits of the City of Bunnell by the City Manager, or designee(s), and the City Manager, or designee(s), is/are hereby directed to take any and all appropriate actions relative to the land use planning documents of the City pertaining to the property annexed pursuant to this Ordinance.

**Section 7. Effective Date.**

This Ordinance shall take effect immediately upon passage and adoption.

First Reading: approved on this 10<sup>th</sup> day of July 2023

Second Reading/Final Reading: adopted on this 24<sup>th</sup> day of July 2023.

**CITY COMMISSION, City of Bunnell, Florida.**

By: \_\_\_\_\_  
Catherine D. Robinson, Mayor

Approved for form and content by:

\_\_\_\_\_  
Vose Law Firm, City Attorney

Attest:

Seal:

\_\_\_\_\_  
Kristen Bates, CMC, City Clerk



**Exhibit "A"**  
**Legal Description**

LEGAL DESCRIPTION

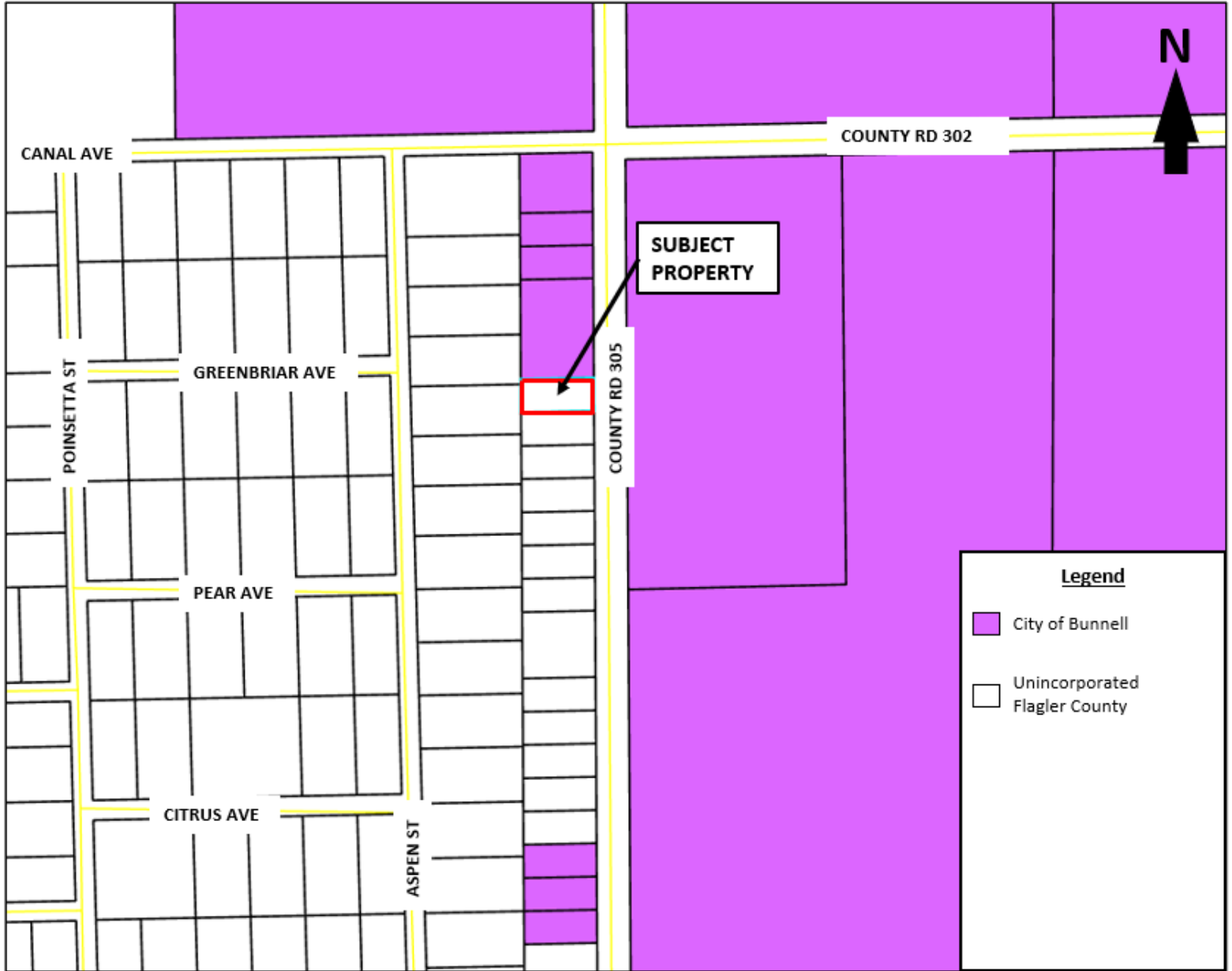
A PARCEL OF LAND LOCATED IN GOVERNMENT SECTION 16, TOWNSHIP 12 SOUTH, RANGE 29 EAST, BEING ALL OF LOT 35, BLOCK 128, DAYTONA NORTH SUBDIVISION, A SUBDIVISION ACCORDING TO PLAT OR MAP THEREOF DESCRIBED IN PLAT BOOK 10, PAGES 1 THROUGH 15, OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

AS A POINT OF BEGINNING, COMMENCE AT A POINT IN THE WESTERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 305, A 100 FOOT RIGHT-OF-WAY, SAID POINT OF BEING THE NORTHEAST CORNER OF SAID LOT 35; THENCE ALONG SAID RIGHT-OF-WAY LINE SOUTH 00°22'24" EAST A DISTANCE OF 100.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 35; THENCE DEPARTING SAID RIGHT-OF-WAY LINE AND ALONG THE SOUTHERLY LINE OF SAID LOT 35 SOUTH 88°48'21" WEST A DISTANCE OF 220.00 FEET TO THE SOUTHWEST CORNER OF SAID LOT 35; THENCE ALONG THE WESTERLY LINE OF LOT 35 NORTH 00°22'24" WEST A DISTANCE OF 100.00 FEET THE NORTHWEST CORNER OF SAID LOT 35; THENCE ALONG THE NORTHERLY LINE OF LOT 35 NORTH 88°48'21" EAST A DISTANCE OF 220.00 FEET THE NORTHEAST CORNER OF SAID LOT 35 AND THE POINT OF BEGINNING OF THIS DESCRIPTION.

CONTAINING 21,997.74 SQUARE FEET, 0.505 ACRES, MORE OR LESS.

PROPERTY ADDRESS: 1138 COUNTY ROAD 305, BUNNELL, FLORIDA 32110

**Exhibit "B"**  
**Location Map**



Location Map





## City of Bunnell, Florida

### Agenda Item No. H.1.

Document Date: 7/6/2023 Amount: \$63,620.00  
Department: Infrastructure Account #: 404-0535-535.6300  
Subject: Request Approval of Engineered Spray Solutions (ESS) FY2023 Ten (10)  
Manhole Rehab Project Proposal and Purchase Order  
Agenda Section: New Business:  
Goal/Priority: Infrastructure

#### **ATTACHMENTS:**

Description	Type
ESS Manhole Proposal	Quote
ESS Contract Pricing	Exhibit

#### **Summary/Highlights:**

The City is currently piggybacking ESS's agreement with the City of Saint Augustine for manhole rehab and would like approval of the submitted proposal and purchase order for the FY2023 Ten (10) Manhole Rehab Project.

#### **Background:**

After the Commission adoption of the Asset Management Plan (AMP) provided by Florida Rural Water Association in FY2021, the Infrastructure Department has implemented an annual manhole rehabilitation program. Staff would like to continue this maintenance as suggested in both the Asset Management and the Utility Master Plan.

After inspection, ESS subcontracted with the City of Bunnell in 2021 and 2022 to repair and line 10 manholes each year. Due to the excellent service provided, Staff would like to continue using their services for the 2023 manhole rehab project.

By approving ESS's proposal and a purchase order in the amount of \$63,620, it will serve as the City's notice for them to proceed with the project.

Scope of project: prepare and line ten (10) manholes with protective lining system and inspect to ensure 100% pinhole free coating.

This project falls under the Master Plan's annual Gravity Sewer Rehab & Renewal which was

included in the FY2023 approved budget.

**Staff Recommendation:**

Approve the ESS proposal and purchase order for the Ten (10) Manhole Rehab Project in the amount of \$63,620.00.

**City Attorney Review:**

**Finance Department Review/Recommendation:**

Recommend approval. Funds for this project were included in the FY 2022-23 approved budget.

**City Manager Review/Recommendation:**

Approved for the agenda



1306 Banana Road, Lakeland, Florida 33810

Office • 863-577-4821

June 28, 2023

**To:** Dustin Vost  
City of Bunnell  
300 Tolman St. PO Box 756  
Bunnell, FL 32110

**Project:** City of Bunnell Ten (10) Manholes to be lined with SprayWall Polyurethane Protective Lining System

- Mobilization of competent crew of four (4) and capable equipment to the City of Bunnell, FL project sites.
- Manholes measured a total of 54 vertical feet to be lined.
- 5,000 psi high pressure water cleaning of the surface within host structure station.
- Remove Roots.
- Make suitable preparation to surface areas to prepare surface for the Euclid V100 has been estimated for proper surface preparation.
- Stop leaks with MasterRoq 355-1K chemical grout.
- Spray-apply up to 250 mils of SprayWall Polyurethane Protective Lining system to chimney, walls, and bench area of manholes. A termination groove will be cut at the flow line to ensure proper adhesion.
- Visually inspect and electronic holiday inspection on SprayWall Polyurethane Protective Lining to ensure a 100% pinhole free monolithic coating.
- Manhole 61 is only to have trough repaired and sprayed.
- Provide Maintenance of Traffic.
- Eight to ten (8-10) days of work estimated to complete this project.

**Included:** ESS professional crew and equipment, MOT

**Exclusions:** Dewatering, bonding, Bypassing of any Wastewater

**Notes:** Up to fifty-four (54) gallons of 355 1k chemical grout for water stop is accounted for in this proposal. However, chemical grout for water stop if required beyond fifty-four gallons, will be invoiced at \$125.00/gallon, at a minimum of 6 gallons, with approved change order. Standby of crew for situations beyond our control could result in additional charges. Any items not included in the above Scope of Work are considered excluded and would be completed only by approved change order. Standby of crew for situations beyond our control could result in additional charges. Any items not included in the above Scope of Work are considered excluded and would be completed only by approved change order. Project is bid based on standard daylight work hours. Balance is due upon completion. Proposal price is valid for 30 days.

### City of Bunnell Ten Manholes

MH D8-16-	\$7,807.00
MH D9-60-	\$7,275.00
MH A1-39-	\$8,859.00
MH A1-7A-	\$7,015.00
MH 61-	\$2,849.00
MH C2-10-	\$5,703.00
MH 65-	\$6,755.00
MH 64-	\$5,963.00
MH 62-	\$6,223.00
MH 63-	\$5,171.00

**Total - \$63,620.00**

Respectfully Submitted,

*Shane Castro*

Shane Castro  
Business Development  
(863) 308-0110

*Jacob Hensley*

Jacob Hensley  
Estimator  
(863) 308-0126

It is mutually understood that in undertaking to correct/repair conditions present, other conditions that were hidden may become known. Such consequences will be beyond ESS's control, and ESS assumes no responsibility for such consequences. ESS will however, use its best skills and experience to avoid or minimize them. The owner assumes responsibility for any hazardous waste uncovered at this site.

1. The *buyer* has furnished pre-bid information used in planning the work covered in this proposal to ESS, and ESS assumes no responsibility for its accuracy. If the conditions are not in accordance with the information furnished to ESS by the *buyer* or others, the recommended procedures and scope of work in this proposal may not apply. The *buyer* will reimburse any additional expenses incurred by ESS as a result of this difference to ESS.
2. Any items of work not specifically included in this proposal shall not be the responsibility of ESS. Any alteration or deviation from the attached or referenced specifications, involving extra costs will be executed only upon written orders, and will become an extra charge over and above this proposal. All agreements are contingent upon strikes, accidents, or delays beyond our control.
3. It is mutually agreed that ESS shall retain all rights conferred upon it by the lien statutes of any State, Federal, or Territorial Government and will exercise lien rights if necessary. If ESS is not paid when required by this contract, interest of 1.5% will be charged per month. If the delinquent amount is referred to an attorney for collection, the buyer will pay all costs of collection including reasonable attorney fees and court costs. Should any legal action be required as a result of this contract, venue for such action shall be Polk County, Florida.
4. Our proposal is based on carrying out the work in a continuous manner during regular working hours. Should our work be delayed or interrupted for any reason beyond our control we will be compensated for standby of the crew and equipment.
5. If conditions beyond ESS's control make it impossible for us to render performance as specified, and buyer elects to terminate the contract, ESS will be entitled to a cancellation charge for any job set-up, in addition to reimbursement in full for all of ESS's costs (including labor, materials, and overhead), plus reasonable profit for all work performed to date of written notification by the buyer.

By executing this contract, owner agrees that all vendor requirements, including but not limited to pre-qualification, insurance, W-9, etc., have been adequately met.



**FINAL BID FORM 1 - COATING METHOD - POLYURETHANE**

9/16/2020

**UNIT PRICE SCHEDULE FOR SANITARY AND STORM MANHOLE & STRUCTURES REHABILITATION BID RFP#PW2020-05**

Final /R2

**Bidders must provide prices for each line item for their bid to be considered responsive. City of Bunnell 2023 MH Rehab Project**

Item No.	Description	Unit	Qty	Unit Price(\$)	Amount (\$)
<b>A - MANHOLE &amp; STRUCTURES COATING - POLYURETHANE</b>					
1	Manhole Protective Resin Based Lining 48" Diameter 1/8" Minimum Thickness	VF	0	\$ 328.00	\$ -
2	Manhole Structural Resin Based Lining 48" Diameter 1/4" Minimum Thickness	VF	54	\$ 376.00	\$ 20,304.00
3	Manhole Structural Resin Based Lining 48" Diameter 1/2" Minimum Thickness	VF	0	\$ 521.00	\$ -
4	Manhole Structural Resin Based Lining 48" Diameter 1" Minimum Thickness	VF	0	\$ 811.00	\$ -
5	Manhole Protective Resin Based Lining 60" Diameter 1/8" Minimum Thickness	VF	0	\$ 410.00	\$ -
6	Manhole Structural Resin Based Lining 60" Diameter 1/4" Minimum Thickness	VF	0	\$ 470.00	\$ -
7	Manhole Structural Resin Based Lining 60" Diameter 1/2" Minimum Thickness	VF	0	\$ 651.25	\$ -
8	Manhole Structural Resin Based Lining 60" Diameter 1" Minimum Thickness	VF	0	\$ 1,013.75	\$ -
9	Structure / Manhole Protective Resin Based Lining 1/8" Minimum Thickness	SF	0	\$ 26.50	\$ -
10	Structure / Manhole Structural Resin Based Lining 1/4" Minimum Thickness	SF	130	\$ 31.00	\$ 4,030.00
11	Structure / Manhole Structural Resin Based Lining 1/2" Minimum Thickness	SF	0	\$ 42.00	\$ -
12	Structure / Manhole Structural Resin Based Lining 1" Minimum Thickness	SF	0	\$ 65.00	\$ -
<b>SUBTOTAL A - MANHOLE &amp; STRUCTURES LINING - POLYURETHANE</b>					<b>\$ 24,334.00</b>
<b>B - MANHOLE &amp; STRUCTURES REPAIR</b>					
13	Removal of Existing Manhole or Wetwell Lining System (Excluding T-Lock Epoxy or Polyurea Liners)	SF	0	\$ 9.00	\$ -
14	Removal of Existing Manhole or Wetwell T-Lock, Epoxy or Polyurea Liners	SF	0	\$ 22.00	\$ -
15	Patching & Profiling - Cementitious Grout Only	SF	803	\$ 12.00	\$ 9,636.00
16	Infiltration Control - Chemical Grout	GAL	54	\$ 125.00	\$ 6,750.00
17	Surface Preparation - Sand Blasting	SF	0	\$ 10.00	\$ -
18	Bench and Invert Channel Repair	LF	40	\$ 225.00	\$ 9,000.00
19	Chimney Repairs	VF	0	\$ 225.00	\$ -
20	Chimney Replacement	VF	0	\$ 675.00	\$ -
21	Chimney sealing (Construction Joint at Ring and Cover)	EA	0	\$ 285.00	\$ -
22	Manhole Rim & Cover Replacement (STD 24" Diameter) - Paved Areas	EA	0	\$ 1,150.00	\$ -
23	Manhole Rim & Cover Replacement (STD 24" Diameter) - Grassed Areas	EA	0	\$ 950.00	\$ -
24	Manhole Rim & Cover Replacement (3PC COSA DETAIL SS1)- Paved Areas	EA	0	\$ 1,550.00	\$ -
25	Manhole Rim & Cover Replacement (3PC COSA DETAIL SS1)- Grassed Areas	EA	0	\$ 1,250.00	\$ -
26	Raise / Re-Level Existing Frame and Cover for Street Adjustment (up to 4")	EA	0	\$ 600.00	\$ -
27	Provide and Install Manhole Cover lid & Pick Hole seals	EA	0	\$ 275.00	\$ -
28	Install Rain Water Protector STD 24" Stainless	EA	0	\$ 365.00	\$ -
29	Install Rain Water Protector Large 31.5" Stainless	EA	0	\$ 485.00	\$ -
30	Install Rain Water Protector STD 24" HDPE	EA	0	\$ 135.00	\$ -
31	Install Rain Water Protector Large 31.5" HDPE	EA	0	\$ 190.00	\$ -
<b>SUBTOTAL B - MANHOLE &amp; STRUCTURES REPAIR</b>					<b>\$ 25,386.00</b>

<b>C - CLEANING, TELEVISIONING AND ASSESSMENT</b>					
32	Cleaning Manholes for Rehabilitation	EA	10	\$ 150.00	\$ 1,500.00
33	Cleaning Structures for Rehabilitation	EA	0	\$ 1,000.00	\$ -
34	Pre and Post Photographs(USB) Manholes for Rehabilitation	EA	10	\$ 150.00	\$ 1,500.00
35	Pre and Post Photographs(USB) Structures for Rehabilitation	EA	0	\$ 300.00	\$ -
36	Mobilization (Inspection only)	WK	0	\$ 1,500.00	\$ -
37	Manhole Inspection Level 1	EA	0	\$ 125.00	\$ -
38	Manhole Inspection Level 2	EA	0	\$ 185.00	\$ -
39	Structure (Wet Well) Inspection Level 1	EA	0	\$ 1,300.00	\$ -
40	Structure (Wet Well) Inspection Level 2 (Includes scan)	EA	0	\$ 1,750.00	\$ -
41	Cleaning Sewer Manholes (CCTV purposes only)	EA	0	\$ 45.00	\$ -
42	Cleaning Stormwater Structures (CCTV purposes only)	EA	0	\$ 65.00	\$ -
43	Cleaning Wetwells (CCTV / Inspection purposes only)	EA	0	\$ 600.00	\$ -
44	Light Storm Drain Cleaning From ROW (Right of way) 8"-10"	LF	0	\$ 4.75	\$ -
45	Light Storm Drain Cleaning From ROW (Right of way) 12"-15"	LF	0	\$ 8.25	\$ -
46	Light Storm Drain Cleaning From ROW (Right of way) 16"-24"	LF	0	\$ 12.25	\$ -
47	Light Storm Drain Cleaning From ROW (Right of way) 30"-36"	LF	0	\$ 29.00	\$ -
48	Light Storm Drain Cleaning From Side and Rear Easements 8"-10"	LF	0	\$ 9.40	\$ -
49	Light Storm Drain Cleaning From Side and Rear Easements 12"-15"	LF	0	\$ 16.40	\$ -
50	Light Storm Drain Cleaning From Side and Rear Easements 16"-24"	LF	0	\$ 24.75	\$ -
51	Light Storm Drain Cleaning From Side and Rear Easements 30"-36"	LF	0	\$ 58.50	\$ -
52	Increase for "Medium" cleaning of storm drain to above line items 44-51	LF	0	\$ 1.75	\$ -
53	Increase for "Heavy" cleaning of storm drain to above line items 44-51	LF	0	\$ 3.50	\$ -
54	Storm Drain CCTV 8" - 10"	LF	0	\$ 3.75	\$ -
55	Storm Drain CCTV 12" - 18"	LF	0	\$ 3.75	\$ -
56	Storm Drain CCTV 18 - 24"	LF	0	\$ 3.75	\$ -
57	Storm Drain CCTV 24" - 30"	LF	0	\$ 3.75	\$ -
58	Storm Drain CCTV 30" - 42"	LF	0	\$ 3.75	\$ -
59	Storm Drain CCTV 42" - 54"	LF	0	\$ 3.75	\$ -
60	Storm Drain CCTV 54" - 66"	LF	0	\$ 3.75	\$ -
61	Box Culvert Top Scan	LF	0	\$ 10.50	\$ -
62	Box Culvert Bottom Debris Mapping scan	LF	0	\$ 5.50	\$ -
63	CCTV Sanitary pipe inspection - includes light cleaning 8"-10" Diameter	LF	0	\$ 3.00	\$ -
64	CCTV Sanitary pipe inspection - includes light cleaning 12"-15" Diameter	LF	0	\$ 3.25	\$ -
65	CCTV Sanitary pipe inspection - includes light cleaning 16"-24" Diameter	LF	0	\$ 6.50	\$ -
66	Dye Testing of Sewer	EA	0.00	\$ 850.00	\$ -
67	Dye Flooding of Sewer	EA	0.00	\$ 1,250.00	\$ -
68	Wastewater Flow Monitoring Equipment Rental and Installation in existing Structures	EA	0.00	\$ 2,750.00	\$ -
69	Wastewater Flow Monitoring Monitoring and Maintenance	EA / Month	0.00	\$ 650.00	\$ -
70	Rainfall Monitoring Equipment Rental and Installation in existing Structures	EA	0.00	\$ 850.00	\$ -
71	Rainfall Monitoring Monitoring and Maintenance	EA / Month	0.00	\$ 300.00	\$ -
72	Line cleaning / Jetting for Sanitary	LF	0	\$ 3.25	\$ -
73	Increase for "Medium" cleaning of sanitary sewer line, ADD to above line item 72	LF	0	\$ 1.25	\$ -
74	Increase for "Heavy" cleaning of sanitary sewer line, ADD to above line item 72	LF	0	\$ 2.50	\$ -
75	GPS Mapping of Requested Manholes	EA	0	\$ 150.00	\$ -
<b>SUBTOTAL C - CLEANING, TELEVISIONING AND ASSESSMENT</b>					<b>\$ 3,000.00</b>

<b>D - ANCILLARY SERVICES</b>					
76	Plug Rental 6" - 10"	DAY	0	\$ 125.00	\$ -
77	Plug Rental 10" - 16"	DAY	0	\$ 150.00	\$ -
78	Plug Rental 16" - 24"	DAY	0	\$ 200.00	\$ -
79	Plug Rental 24" - 36"	DAY	0	\$ 250.00	\$ -
80	Bypass Pumper Truck	HOUR	0	\$ 325.00	\$ -
81	Bypass Vac-Truck	HOUR	0	\$ 325.00	\$ -
82	Maintenance of Traffic (MOT) - Arterial (single lane closure)	EA	0	\$ 1,250.00	\$ -
83	Maintenance of Traffic (MOT) - FDOT (single lane closure)	EA	0	\$ 1,500.00	\$ -
84	Maintenance of Traffic (MOT) - Neighborhood (Simple MOT including Flagmen)	EA	10	\$ 600.00	\$ 6,000.00
85	Mobilization Standard (per Crew)	WK	2	\$ 2,450.00	\$ 4,900.00
86	Mobilization Emergency (per crew)	EA	0	\$ 3,750.00	\$ -
87	Meals/Hotel/Lodging (per crew)	DAY	0	\$ 600.00	\$ -
<b>SUBTOTAL D - ANCILLARY SERVICES</b>					<b>\$ 10,900.00</b>
<b>E - COST of INVOICE PLUS OH/P ON MISCELLANEOUS SERVICES</b>			<b>BUDGET</b>		
88	Bypass Pumping Services		\$ -	15% OH/P	\$ -
89	Maintenance of Traffic CUSTOM INDEX		\$ -	15% OH/P	\$ -
90	Bypassing Plug (HAVE TO ORDER)		\$ -	15% OH/P	\$ -
91	Miscellaneous / Unexpected Materials or Services		\$ -	15% OH/P	\$ -
92	Extra / Miscellaneous		\$ -	15% OH/P	\$ -
93	Extra / Miscellaneous		\$ -	15% OH/P	\$ -
<b>SUBTOTAL E - COST PLUS ON MISCELLANEOUS SERVICES</b>					<b>\$ -</b>
<b>SUMMARY OF BID FORM 1 - LINING METHOD - POLYURETHANE</b>					
<b>SUBTOTAL BID PRICE (A) MANHOLE AND STRUCTURES COATING - POLYURETHANE (SUM ITEMS 1 -12)</b>					<b>\$ 24,334.00</b>
<b>SUBTOTAL BID PRICE (B) MANHOLE AND STRUCTURES REPAIR (SUM ITEMS 13 - 31)</b>					<b>\$ 25,386.00</b>
<b>SUBTOTAL BID PRICE (C) CLEANING, TELEVISIONING AND ASSESSMENT (SUM ITEMS 32-75)</b>					<b>\$ 3,000.00</b>
<b>SUBTOTAL BID PRICE (D) ANCILLARY SERVICES (SUM ITEMS 76-87)</b>					<b>\$ 10,900.00</b>
<b>SUBTOTAL BID PRICE (E) COST PLUS ON MISCELLANEOUS SERVICES (SUM ITEMS 88-93 )</b>					<b>\$ -</b>
<b>TOTAL BID PRICE 1-LINING METHOD - POLYURETHANE</b>					<b>\$63,620.00</b>
<b>Bond amount calculated at 3% of total bid Price 1</b>			<b>3%</b>		<b>\$ -</b>
<b>Bond Amount</b>	<b>Multiplier 3% (for use on projects over \$100,000.00)</b>			<b>Total project</b>	<b>\$ 63,620.00</b>



## City of Bunnell, Florida

### Agenda Item No. H.2.

Document Date: 7/10/2023 Amount:  
Department: Finance Account #:  
Subject: Setting the Maximum Millage Rate  
Agenda Section: New Business:

#### Summary/Highlights:

Set FY 2023/2024 Tentative Millage Rate & First Budget Public Hearing

#### Background:

Annually, the Property Appraiser must certify the taxable value by July 1st. Afterwards, the City has 35 days to set a tentative millage rate and the first public hearing for the budget. The Property Appraiser will then complete and mail out the TRIM notices to all property owners in August.

When adopting the millage rate, the Commission can also adopt a rate lower than the one established tonight; however, the Commission could not adopt a rate higher than the one established tonight. In order to have the flexibility needed when adopting budgets, is it better to set the tentative rate higher.

#### Staff Recommendation:

Set the tentative millage rate at 8.43 mils (one mil increase to the current millage rate) and the first public hearing for Monday, September 11th at 7:00pm in the Flagler County Commission Chambers.

#### City Attorney Review:

#### Finance Department Review/Recommendation:

Recommend Approval

#### City Manager Review/Recommendation:





## City of Bunnell, Florida

### ATTACHMENTS:

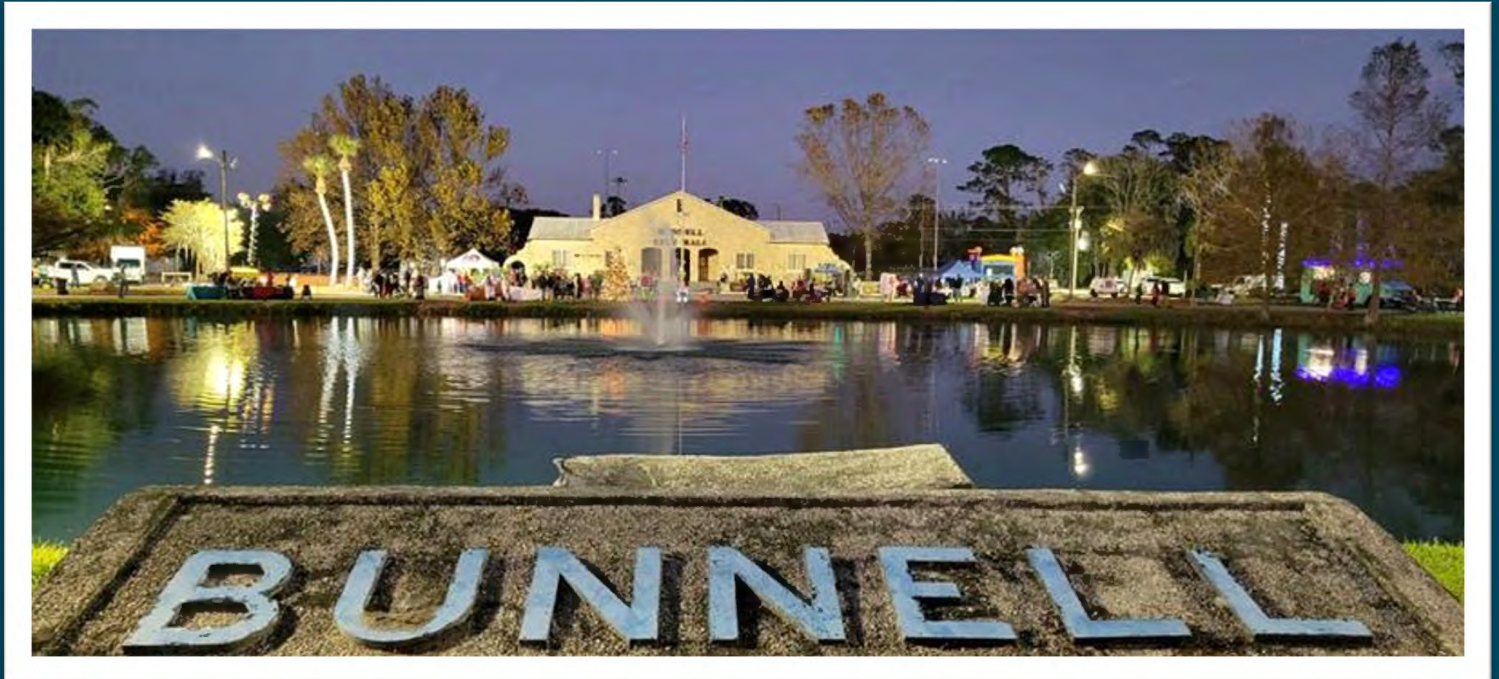
Description

City Manager Report- June 2023

Type

Exhibit

# City Manager's Monthly Report



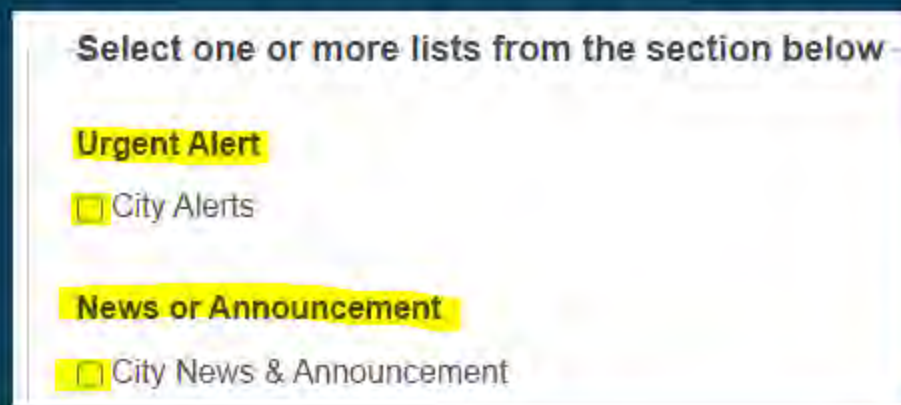
**Dr. Alvin B. Jackson, Jr.**  
**City Manager**  
**For June 2023**

Published: July 2023

## City News, Announcement and Alerts

The City uses it's website to send out important notifications. This could be storm related information and alerts, emergency operations information, boil water notices, City event details and any other information the City may need to share with citizens quickly.

If you are not currently subscribed to get notifications from the City, please register now. You register from [www.bunnellcity.us](http://www.bunnellcity.us), click the subscribe button in the middle of the page and then complete the fields on the next page. To get the alerts the City sends out, make sure that the buttons next to City Alerts and City News & Announcements are checked.



Select one or more lists from the section below

**Urgent Alert**

City Alerts

**News or Announcement**

City News & Announcement

### Did you know?

The City Manager Report is published with the second Commission Meeting agenda of each month; however, it is also published to the City's website. You can see back issues of the report and see what is going on within the City by reviewing this report every month.



## City Commission Mission Statement

The City Commission of the City of Bunnell is dedicated to providing its citizens, businesses and visitors with quality services that ensure Life, Liberty and the Pursuit of Happiness!

## Core Values

The following are the core values for the City of Bunnell:

- Loyalty to the team, the objectives, and the mission.
- Teamwork. Cultivate a “we environment.”- Be passionate team player.
- Communication. Share information freely, maintain an on-going dialog.
- Respect individual strengths; Embrace diversity.
- Empathy. Care about people.
- Always determine what is important to team members.
- Honor everyone. Demonstrate respect for all persons.
- Say “thank you.” Show appreciation in every way possible.
- Self-Control. Stay open, ask questions & maintain clam demeanor in the face of every challenge.
- Have a forgiving spirit.
- Professionalism always. Maintain a positive attitude & a pleasing personality.
- Cultivate creativity.
- Seek great personal satisfactions in helping others succeed.
- Be an active listener– quick to hear, slow to speak.
- Be a person of fairness & justice to all.
- Have an action plan, including results oriented goals with measurable outcomes.
- Create a culture of warmth & belonging, where everyone is welcome.
- Have fun; create an environment where employees can think big & excel.
- Integrity: to be honest, open, ethical & fair.
- Fiscal accountability: to be good stewards of agency funds.



## Mission Statement

The City of Bunnell will provide its residents, businesses, visitors, partners and staff with value centric leadership to create a safe, sustainable, attractive, strong and vibrant community while building on our rich heritage as the foundation to improve the City's economic future and to achieve the highest possible quality of life for the overall community through the exemplary services we provide.

## Vision Statement

The City of Bunnell commits to building on its heritage, while enhancing a high quality of life for all its citizens. We pledge to work in collaboration with our residents and business community to foster pride in the City, develop a vibrant and diverse economy and a thoughtful plan for the future.

## Park Updates, Facility Rentals and Garage Sale Permits

All City parks are open. Parks operate during daylight hours (ie. dawn to dusk).

The City is accepting applications for the rental of parks and other available facilities. Applicants are required to turn in a completed application with sufficient time to process the rental request. Applications can be obtained at the Bunnell Customer Service Office located at 604 E. Moody Blvd. Unit 6 or on the City website [www.bunnellcity.us](http://www.bunnellcity.us) under FORMS.



### FACILITY ALERTS

- Coquina City Hall located at 200 S. Church Street is not currently available to rent.
  - The remediation of the hall was completed in August/September.
  - Design is complete and approved by both the State and Federal governments. Because of the historic designation on this building, any design plans need to be approved by the State and Division of Historical Resources.
  - The RFP for construction was released in March and the City is working on a contract with a construction company so the first phase of the restoration of the hall can begin.
  - To fully restore Coquina City Hall (given current construction costs), the City will need to invest over \$1 million into the facility,
- Municipal Park is at its new location: 1307 E. Howe Street (former Clegg Property)

### Garage Sale Permits:

The City is accepting requests for Garage Sale Permits. Residents need to make their request to the Utility Billing Department. Per the City Code of Ordinance, there is a limit on the total number of garage sale permits that can be issued to a property/address point in a calendar year. Speak with the staff in Utility Billing for any questions regarding Garage Sale Permits 386-437-7500 x 3.

## Information Technology

Repaired the radio bridge. All cameras in the Public Works and Wastewater treatment plant are back up and operational now. Also installed additional storage on the recorder.

Following an incident at 604 E. Moody Blvd. where a rock was evidently thrown and broke a pane of glass on one of our suites, Chief suggested the addition of cameras in each of the suites looking out to the parking lot. Purchase the equipment Chief recommended, along with 2 additional cameras. Installed the 6 cameras, and the NVR. This replaces the system of 3 cameras that was already in place in Finance.

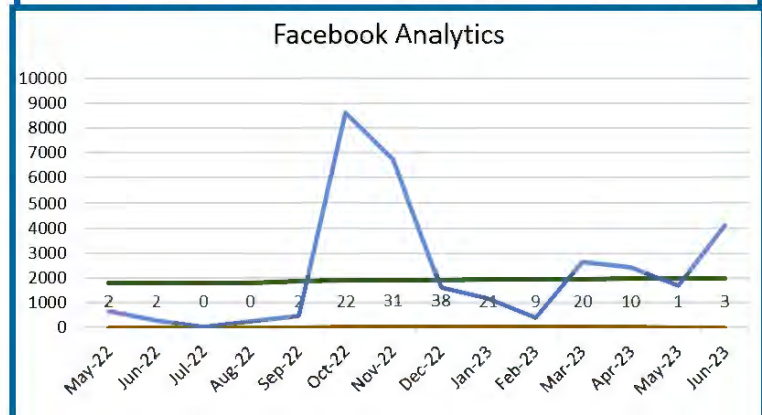
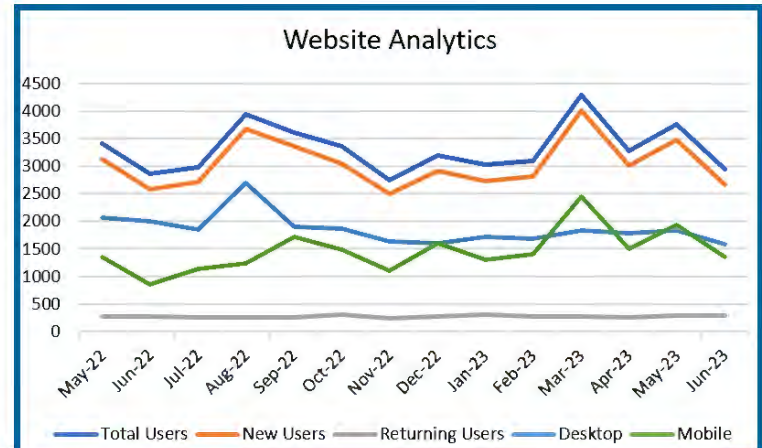
Working with the various vendors on the licensing for the Cybersecurity grant. The State is providing licensing for various security products. Attended kickoff meetings, and started receiving access to various portals.

Had some issues with the phone system in the PD. The phones ride their internet connections. They prior had an intermittent connection issue with the internet. But this time it seemed different as they were not having problems accessing any websites. Opened a ticket with Spectrum, and TPx (phone vendor). This time TPx noticed an issue in the call logs, and made changes to the network. They also suggested updating the firmware on the phones. These 2 actions seemed to have resolved the issue.

Setup a Linked In corporate page, and a PD subpage at the request of the PD. They wish to start using it as a recruiting tool. Made this available to our HR Manager as well.

### Top 10 web pages:

- |                     |                      |
|---------------------|----------------------|
| 1. Home Page        | 6. Community         |
| 2. Open Positions   | 7. Solid Waste       |
| 3. Building Permits | 8. Human Resources   |
| 4. Police           | 9. Contact Directory |
| 5. Agendas          | 10. Forms            |



## City Clerk Office

The City Clerk Office published and noticed all agendas for the City's Public meetings held in June. Public Meetings are City Commission meetings, workshops and Executive Strategy Sessions, and any volunteer Board meetings such as the Planning, Zoning and Appeals Board and Code Enforcement Board.

The Clerk's Office also worked on the following issues throughout the month:

- Working with contractor for the design for reconstruction of Coquina City Hall and on-going contact with Department of State for the Historical Resources Grant for the restoration of Coquina City Hall (agreements executed in October); design plans are 100% complete. Because this is a National Historic Building, both the State and Federal Historic Preservation offices have to approve any changes to the building. The plans are approved.
- The RFP for Coquina Reconstruction Phase 1 was released on March 27, 2023 and Bid Opening occurred on May 9, 2023. The Selection Committee met and the City is working to negotiate a contract with a construction firm at this time. The City is still in negotiations with the contractor. Work cannot start until a contract is approved by the State and executed between the City and contractor.
- Release of RP 2023-02 Solid Waste Dumping Fees; creating addendums as needed to answer questions. RFP bid submittal date is July 13, 2023 at 10:00 AM

## Business Tax Receipts (BTRs)

All notices for FY 23/24 were mailed out to the address of record for each registered business the last week of June. If you have not received the notice or have questions about your renewal, please contact the Deputy City Clerk at 386-263-8981.

Businesses should pay their BTR Renewal fees by September 30, 2023 to avoid paying penalties and/or code enforcement action. Florida Statute and the City's Code of Ordinance require penalties be added to a BTR if not paid by **September 30th**. The required penalties are as follows: 10% October 1st; 15% November 1st; 20% December 1st; and 25% January 1st. The City does not have the authority to waive penalties.

In the month of June, 6 businesses either renewed their BTR or received their initial BTR. The City collected \$953.00 in BTR and Fire Inspection fees for June 2023.

***Businesses with questions about their BTR should call the City Clerk Office at 386-437-7500 x 5 or email the Deputy Clerk at [bgunnells@bunnellcity.us](mailto:bgunnells@bunnellcity.us)***

**ANNIVERSARIES:**

The City acknowledges and celebrates the following for their continued commitment to the City and her citizens and business owners:

Joseph Robinson—6/6/2005

Scott Schalk—6/11/2012

Shane Groth—6/24/2013

Bernadette Fisher—6/6/2022

Jeffrey Gibson—6/20/2022

Alexander McCarthy—6/20/2022

Kathryn Brumley—6/20/2022

Jefferson Traylor—6/20/2022



**NEW EMPLOYEES:**

The City wants to give a warm welcome to our newest employees:

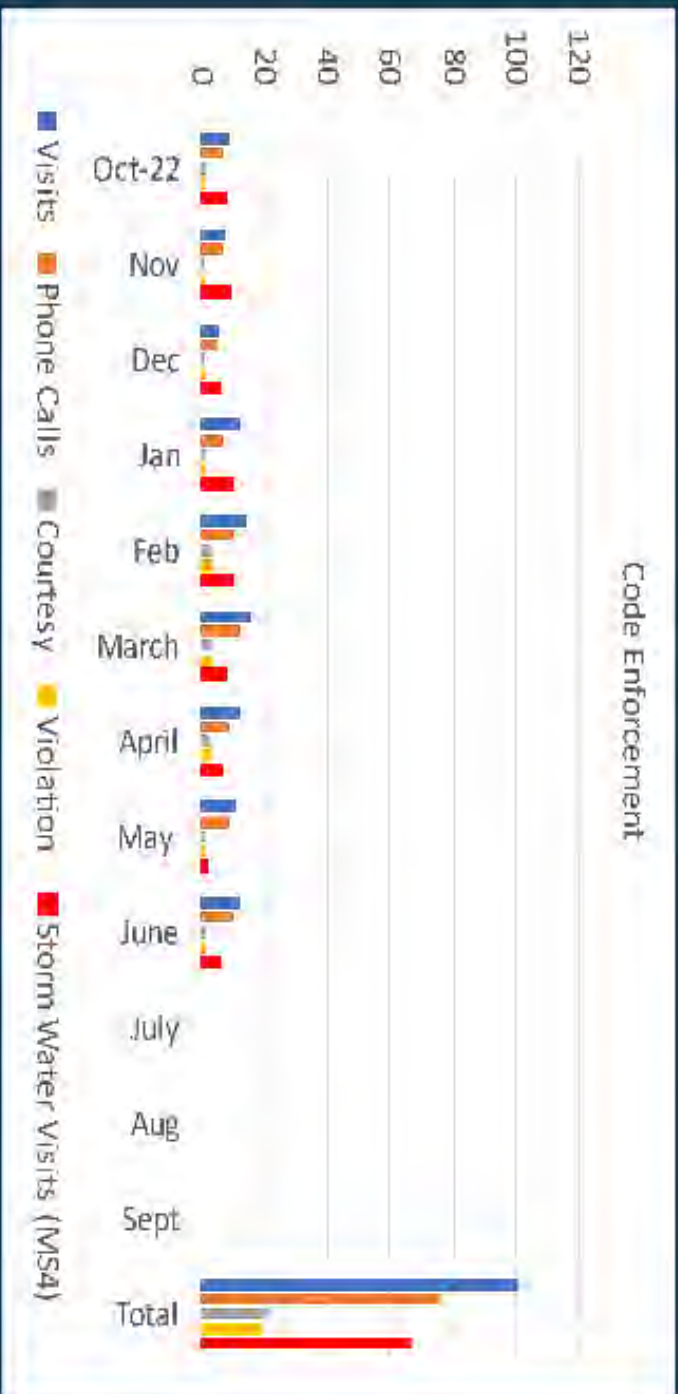
Erica Jurjo– Assistant Project Manager

**WE ARE HIRING. OPEN POSITIONS:**

Police Officer

Police Officer Sponsorship

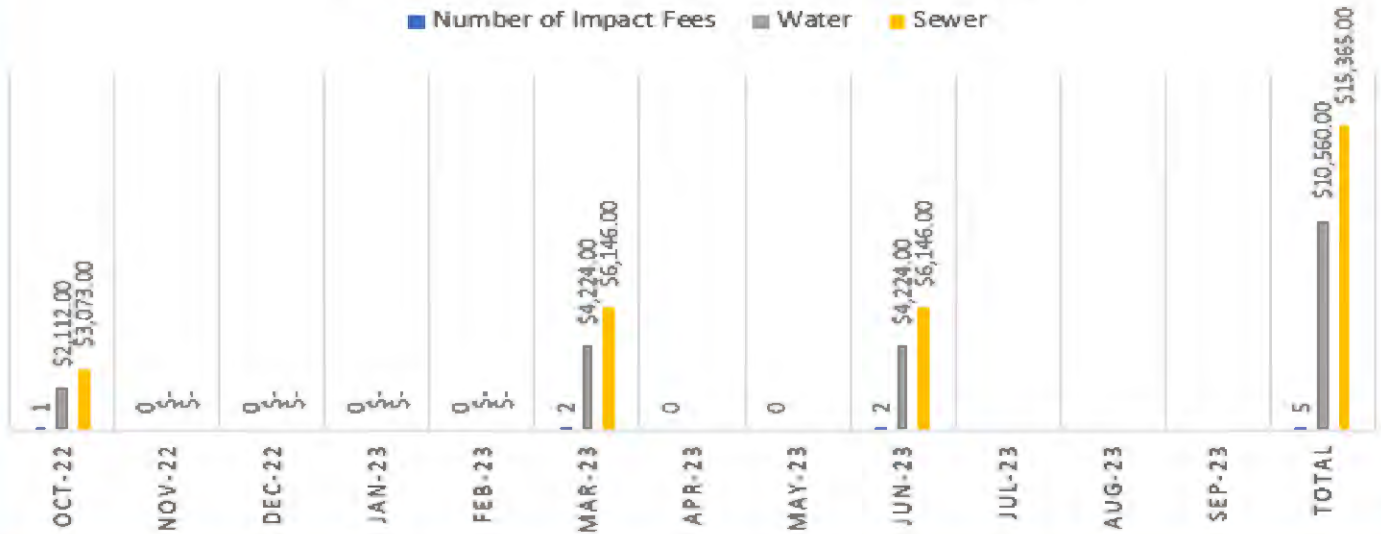




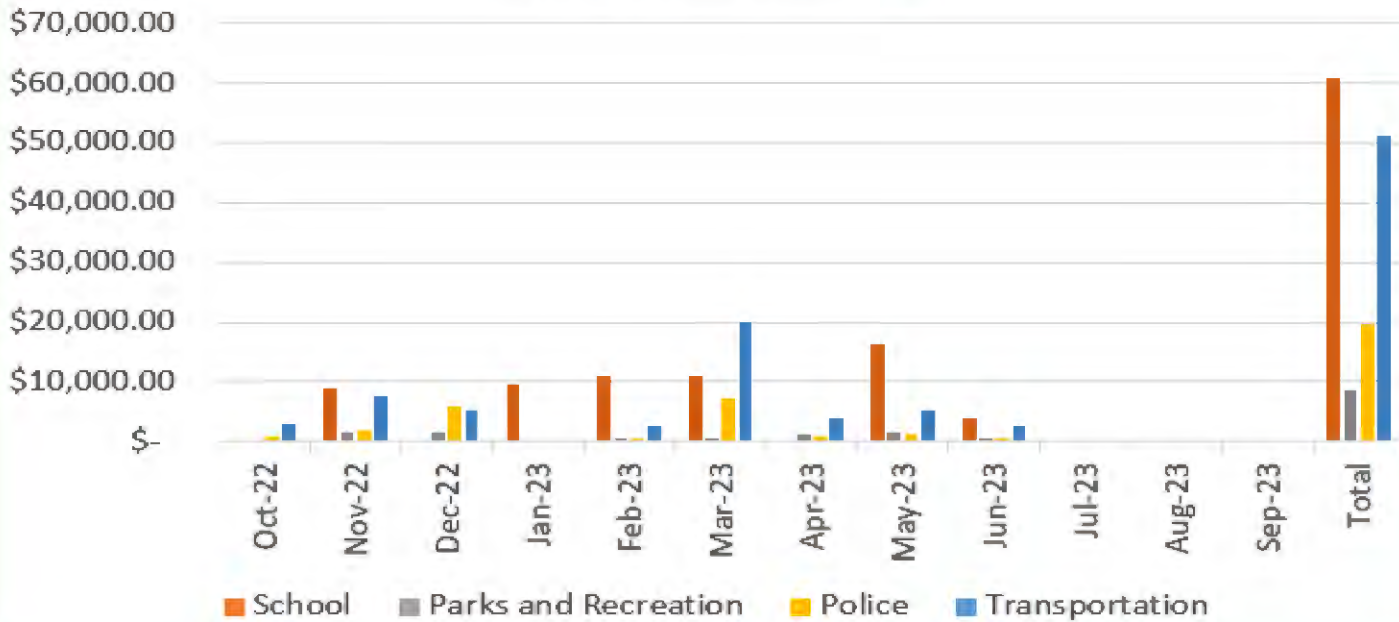
# Community Development

## IMPACT FEES WATER/SEWER

■ Number of Impact Fees ■ Water ■ Sewer



## Impact Fees General Fund



## Projects

### Grant Projects:

### Expense

### Grant Amt

#### Community Development Block Grant (CDBG) - Hymon:

\$ 15,250

\$ 700,000

This project would install underground storm conveyance pipes and catch basins along both sides of Hymon Circle allowing rainwater to properly drain instead of consistently flooding the residents' front yards. Also, included in this project would be the clearing and widening of the main drainage canal running from E. Short St. and Hymon Circle south along US1 to our MS4 outfall. This will increase drainage capacity for the entire southeastern quadrant of the city. Finally, a dirt service road would be constructed to access the canal for future maintenance by the city.

Design 90% complete, currently in the permitting process with FDEP and SJRWMD.

#### HMGP Permanent Generator:

\$ 300,000

Purchase and installation of a 150kw backup generator with 500-amp ATS and docking station. When the new Administration/PD building is constructed, this will ensure the City of Bunnell's Police Department and essential staff are able to conduct operations in the event of loss of power during natural emergencies.

Project scoring approved at LMS meeting. Application in process.

### Master Plan Projects / Capital Projects:

### Funding Amt

#### Wastewater Treatment Plant Rehab/Expansion Construction:

\$ 33,820,022

The project entails design, permitting, funding assistance, and construction administration services to rehabilitate the existing plant and expand the treatment capacity to 1.20 MGD.

PC Construction was awarded CMAR Preconstruction Phase Services at the May 22 Commission Meeting. Contract fully executed.

#### MP Gravity Collections System Renewal & Replacement:

\$ 63,620

Annual 10-Manhole Repair and Line.

Proposal received. Staff Report in process.

### Capacities WTP/WWTP

- Capacity for the WWTP in June 2023 was 68% with a total of 8.35" of rainfall. Total influent flow for the month was 12.164MG, with a Daily Average flow of 0.405MGD
- Total Reclaim Flows June 2023 8.235MG with Daily Average flow of 0.275MGD.
- The WTP produced 12.700MG of drinking water, with a daily production average of 0.410MGD in June 2023.
- Total Billed Meters June- 2200



## Solid Waste

SERVICE	AMOUNT COLLECTED	TRUCK LOADS
Residential Garbage	129.45 Tons	9.95
Residential Recycle	29.31 Tons	2.25
Yard Waste	68 Yards	3.4
Commercial Garbage	226.71 Tons	17.43
Commercial Cardboard	21.91 Tons	1.68
Scrap Metal	0 Tons	0
Construction & Demolition and Bulk debris	42.61 Tons	12.17
Waste Tires	0 Tons	0

### Cart Placement Regulations and Guidelines

- ⇒ Face lid opening of cart toward the street (handles & wheels facing house)
- ⇒ Place front of cart within 3 feet of street edge
- ⇒ Allow 2 to 3 feet of clearance on each side of all carts and ANY obstruction
- ⇒ Do NOT fill carts with construction debris, dirt or yard waste
- ⇒ It is recommended to place carts out the night before. The driver is not able to turn around if your cart is not out when the truck has passed your location
- ⇒ Do not place carts near parked cars, fences, mailboxes, trees, other carts, or any other obstruction that could interfere with the truck picking up your cart.



***Failing to follow the guidelines may result in service interruption (i.e. the City won't be able to collect your solid waste that day)***

## Solid Waste Fiscal Year Comparisons

	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b> (as of 6/30/23))
<b>Commercial Solid Waste</b>	1960.54 Tons	1995.58 Tons	2374.65 Tons	1973.78 Tons
<b>Residential Solid Waste</b>	1380.89 Tons	1546.61 Tons	1446.87 Tons	1162.44 Tons
<b>Cardboard &amp; Recycle</b>	585.98 Tons	623.3 Tons	582.61 Tons	416.04 Tons
<b>Yard Waste</b>	1593.00 Yards	1153 Yards	1203 Yards	3108 Yards
<b>Construction &amp; Debris (C&amp;D)</b>	315.51 Tons	574.58 Tons	319 Tons	283.33 Tons
<b>Scrap/Misc.</b>	12.789 Tons	4.27 Tons	16.44 Tons	22.47 Tons
<b>Yearly Total</b>	<b>5848.71</b>	<b>5897.34</b>	<b>5942.57</b>	<b>6966.06</b>

***The City has already exceeded the prior fiscal year total collections by 1,023.49 Tons; this is a 17.22% increase over the last fiscal year***