ADDENDUM NO. 1 April 23, 2024

PROJECT: Traffic Signal Preventive Maintenance - South Zone Project No. 20240052 (MCC 7040)

BID DUE May 8, 2024, 02:00P.M.

- DATE:
- FROM: Miami-Dade County DTPW Capital Improvements Division 111 NW First Street, 14th Floor Miami, FL 33128 305.375.2930
- TO: Prospective Bidders and Interested Parties

This Addendum forms part of the project solicitation documents and will be incorporated into the Contract Documents, as applicable. Insofar as the Original Contract Documents, Drawings and Specifications are inconsistent, this Addendum shall govern. Please acknowledge receipt of this Addendum, at the time of bid submittal to Miami-Dade County, in the space provided on the "Acknowledgement of Addenda Form" provided with the project solicitation documents. Failure to acknowledge receipt of all addenda may be cause for disqualification.

CHANGES TO THE INVITATION TO BID:

1. Change Estimated value from \$1,332,800.00 to \$1,029,750.00.

CHANGES TO THE SPECIAL PROVISIONS:

1. Delete Appendix "B" to the Special Provisions, Preventive Maintenance Checklist, in its entirety and replace it with Revised Preventive Maintenance Checklist for Addendum No. 1 herein.

END OF ADDENDUM NO. 1

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Alfredo E. Muñoz, P.E. Chief, Capital Improvements Division Department of Transportation and Public Works (DTPW)

AM:jbp

c: Jean Bernard Philippeaux, DTPW Pedro P. Nuñez, P.E., DTPW Clerk of the Board Frank Aira, P.E. DTPW Caesar Suarez, SBD Project File

TRAFFIC SIGNALS AND SIGNS (TSS) PREVENTIVE MAINTENANCE CHECKLIST Project:											
Intersection:		Asset Number:									
Contractor:										TR	DEPARTMENT OF ANSPORTATION AND PUBLIC WORKS
Controller Model and Manufacturer:						Inspection Date:					
GPS C	GPS Coordinates → Controller Location Longitude				FPL Service Point			Latitude Longitud			
Technician Name:			l	Time In:				Time Ou			
Task					Completed	Remarks					
	Vehicular Signal Heads Perform ground level inspection of signal head alignment and MUTCD										
	signal heads as necessary.	ment and MU	ICD		□Ok □N/A	□Alig	□Aligned signal heads				
Perform ground leve include photos.	el inspection of all signal related	signing. <mark>Note</mark>	deficiency a	and	□Ok □N/A	□Noted deficiency (photos included)					
Inspect and clean le	enses and lamps for all approach	ies				-					
	ciency and include photos. enses and burned-out lamps mu	st be reporte	d to the TM	С	□Ok □N/A	🗆 Not	Noted deficiency (photos included)			ded)	
Inspect and clean al	Il visors. Note cracked/broken v ecuring visors to the signal head.	isors and incl	ude photos.		□Ok □N/A	□Noted deficiency (photos included)					
Inspect traffic signal and include photos.	I housing for cracks or damage.	Note damage	d signal head	ds	□Ok □N/A	Noted deficiency (photos included)					
Check terminal bloc	k connections. <mark>Secure as necess</mark>	ary.			$\Box Ok \Box N/A$						
	nounting hardware. Retighten a				□Ok □N/A	Retightened					
(Check as-built plan		-		ssary	□Ok □N/A	□Adjusted height					
Check condition of I deficiency and inclu	bushing on cable outlet and univ	ersal hangers	. Note		□Ok □N/A	□ Not	Noted deficiency (photos included)				
· · · · · · · · · · · · · · · · · · ·	ack plates. Note damaged back	plates and inc	lude photos		□Ok □N/A	□Cleaned □Replaced □ Noted damage					
Inspect for signals obstructed by vegetation. Trim tree foliage as necessary.					□Ok □N/A						
Pedestrian Signal Heads						There are	no	pedest	triar	n signal heads.	
Inspect and clean all visors and lenses.				□Ok □N/A							
inspect pedestrian housing for cracks or damage. Note deficiency and include photos.				□Ok □N/A	Replaced D Noted deficiency (photos included)						
Check terminal block connections. Secure as necessary.				□Ok □N/A							
Inspect gaskets and mounting hardware. Retighten as necessary.				□Ok □N/A	Retightened						
Check pedestrian signal head alignment relative to the crosswalk. Align ped heads as necessary.			ads	□Ok □N/A	□Realigned						
Inspect brightness of ped signal heads. Note deficiency and include photos.					□Ok □N/A	□Rep	laced modu	le 🗆] Noted	l def	iciency
Pedestrian Pu	ishbuttons						There are	no	pedest	triar	n pushbuttons.
Inspect housing for damage. Tighten as necessary. Note deficiency and include photos			е	□Ok □N/A	□Reti	ghtened				•	
	all push buttons at the control c	abinet. <mark>Corre</mark>	ect deficienc	ies.	□Ok □N/A	Corrections made					
Note type of pedestrian signal heads.					□Ok □N/A		□Countdown ped signal heads □Non-countdown ped signal heads				
Ensure ped signal head operation matches signal timing documents. Contact Area Engineer if discrepancies found.				eer if	□Ok □N/A	Contacted:					
Inspect condition of push-button signs. Note deficiency and include photos.					□Ok □N/A	Noted deficiency (photos included)					
Signal Poles and Mast Arms											
Ensure that all pole ground lugs are properly bonded to grounding system. Bond as necessary.				d as	□Ok □N/A	□Bonded					
Inspect mast arm grout pads/vermin screens and bolts. Note any deficiencies and include photos				s and	□Ok □N/A	Not	Noted deficiency (photos included)				
Tighten bolt covers/	caps. Note missing bolt covers				□Ok □N/A	□Tightened □Missing bolt covers (photos incl.)					
Inspect handhole covers. Secure any loose covers. Note missing covers and include photos.					□Ok □N/A	□Secu					

Task	Completed	Remarks
Clear drainage holes in pole bases (if applicable).	□Ok □N/A	Drain Cleaned
Inspect terminal strip connections. Tighten and label as necessary.	□Ok □N/A	□Tightened □Labeled
Inspect vertical pole caps and mast arm end caps. Note missing caps and include photos.	□Ok □N/A	Noted deficiency (photos included)
 Handhole: Inspect integrity of splices in signal cable Check ground rod, clamp, and ground wire connection. Repair any deficiencies. 	□Ok □N/A	□Repaired
Inspect condition of signal cable. Ensure cable is not rubbing against outlets or sharp edges at entrance of poles, brackets, and signal heads. Note deficiencies and include photos.	□Ok □N/A	Noted deficiency (photos included)
Span Wire Signals		
Inspect condition of strain vises. Note any deficiencies and include photos.	□Ok □N/A	Noted deficiency (photos included)
Inspect upper and lower tether span wire for damage, deterioration and excess sag. Note deficiency and include photos.	□Ok □N/A	Noted deficiency (photos included)
Inspect all connecting span wire hardware, including brackets. Tighten loose connections. Note deficiency and include photos.		Retightened Replaced
Inspect guy anchors for proper attachment and/or damage. Tighten as necessary.	□Ok □N/A	Retightened
Conduit System and Junction Boxes		
Inspect condition of junction box Replace all missing duct seal. Refill missing pea rock. Note cracked pull box lids and include photos. 	□Ok □N/A	□Refill pea rock □Replaced duct seal □Noted damaged lid (photos included)
Ensure pull box lid title matches use of pull box. Note mismatches.	□Ok □N/A	\Box Noted mismatch (photos included)
Remove all debris and overgrowth around junction boxes. Check proper seating of junction box covers. Replace or tighten cover bolts as necessary.	□Ok □N/A	Debris removed Replaced Retightened
Inspect grounding and secure all straps and rod connections.	□Ok □N/A	
Check above ground conduit for damage. Note damaged and/or missing conduit, weather heads, or straps.	□Ok □N/A	Noted deficiency (photos included)
Inspect junction boxes for proper grade in sidewalks or other roadside surfaces. Note any deficiencies and include photos.	□Ok □N/A	\Box Noted deficiency (photos included)
Traffic Signal Cable		
Inspect all above ground signal cable splices. Note deficiencies and include photos.	□Ok □N/A	\Box Noted deficiency (photos included)
Inspect condition of traffic signal cable for dry rot, nicks, cuts, or other damage to the outer jacket insulation. Note deficiency and include photos.	□Ok □N/A	Noted deficiency (photos included)
Check all connections are tight and terminated correctly.	□Ok □N/A	□ Tightened
Detector Operation (Inductive Loops):		
Inspect all detector loops and verify detection calls in cabinet rack and controller for each phase with detection. Document any deficiencies.	□Ok □N/A	Found deficiency
Ensure proper labeling and splicing for all loop leads.	□Ok □N/A	Found deficiency
Retune loop detector amplifier at the cabinet as necessary.	□Ok □N/A	□Adjusted
Check all detector loops for sealant deterioration, exposed wire, etc. Note any deficiency and include photos.	□Ok □N/A	
 Report all damaged inductive loops to TSS project manager. Approval for loop replacement must be provided by project manager 	□Ok □N/A	Replaced
Detector Operation (Video Detection):		
Inspect video camera operation. Confirm vehicle calls on the video controller unit.	□Ok □N/A	
 Verify operation and activation of each detection zone. Reconfigure detection zone as necessary. Note any processor issues in cabinet. 	□Ok □N/A	Detection zone reconfigured Processor issues noted
Check video camera positioning with monitor. Adjust alignment as needed.	□Ok □N/A	□Adjusted
Verify camera cables are secure and labeled for identification of phase/direction in cabinet. Secure and label as necessary.	□Ok □N/A	
Inspect video camera mounting hardware. Tighten any loose connections.	$\Box Ok \Box N/A$	Tightened connections.
Inspect camera head for damage. Note any deficiencies and include photos.	□Ok □N/A	□Deficiency noted (photos included)

Task	Completed	Remarks
Clean camera lens.	□Ok □N/A	
Battery Backup System (BBS)		□ There is no battery backup system
Check BBS display for AC IN, UPS Output, and inverter indications. All should be		
on when utility power is supplied to the cabinet.	□Ok □N/A	
Check battery level and load level displays.		Voltage: Click here to enter text. Volts
Test batteries. Note any deficiencies and low voltage batteries.	□Ok □N/A	□Bad Battery
Keep a log of events including total battery run time between maintenance checks to help identify problematic locations.	□Ok □N/A	
Clean and secure all battery connections.	□Ok □N/A	
When Generator is present:	□Ok □N/A	
Verify incoming line voltage.		Voltage: Click here to enter text. Volts
Verify DC output to batteries.		Voltage: Click here to enter text. Volts
Verify AC output on inverter.	□Ok □N/A	Voltage: Click here to enter text. Volts
Check electrical connections.	□Ok □N/A	
Test system via simulated power outage at cabinet to ensure operation of automatic transfer switch.	□Ok □N/A	
Check generator transfer switch for corrosion.	□Ok □N/A	
Record events and run times either saved on UPS unit	□Ok □N/A	
Uninterrupted Power Supply (UPS) System		
Load-test all batteries. Note the date and test results on each battery.	□Ok □N/A	Tested and marked each battery
Perform 15-minute test.	□Ok □N/A	
Verify bypass switch is operating properly.	□Ok □N/A	
Verify unit is set for 50% fully operational and 50% red flash.	□Ok □N/A	
Inspect and test battery charging system.	□Ok □N/A	
Controller and Meter Cabinets	1	1
Inspect nuts and anchor bolts on traffic signal cabinet. Tighten loose nuts	□Ok □N/A	□ Tightened
Inspect foundation seal: • C heck for evidence of water intrusion • Check the seal at the bottom of the foundation. Reseal if necessary		
 Check for drainage obstructions. Clean obstructed drains 		Drain Cleaned
Inspect cabinet exterior for graffiti, stickers or other unauthorized items. Remove stickers and graffiti. Paint rusty cabinet w anti-corrosive paint.	□Ok □N/A	Removed stickers/graffiti Painted
Inspect door gaskets for evidence of moisture or deterioration. Replace any gaskets showing signs of leakage or deterioration.	□Ok □N/A	Gasket Replaced
Clean cabinet vents	□Ok □N/A	
Replace air filter	□Ok □N/A	
Inspect cabinet fan and ensure proper operation. Replace inoperative fan	□Ok □N/A	Replaced fan
Verify proper operation of interior light and switch. Replace if necessary.	□Ok □N/A	
Inspect thermostat. Verify correct temp setting (96). Replace broken thermostat	□Ok □N/A	Temp Replaced thermostat
Inspect main and auxiliary panel harness on cabinet door. Ensure harnesses are not pinched and do not bind against cabinet door. Adjust harness as necessary.	□Ok □N/A	
Inspect Hinges and Locks. Ensure free movement of all doors, latching assemblies and locks on all enclosures. Lubricate hinges and locks Remove excess paint from door locks	□Ok □N/A	□Lubricated □Removed excess paint
Vacuum interior of cabinet. Blow and brush off shelves, terminal blocks and components.	□Ok □N/A	
Check for signs of ants, wasps or other insects or rodents within the cabinet. Install insect repellent.	□Ok □N/A	□Insect or rodent issue; corrective action taken
Cabinet Grounding Check resistance between AC and ground Check grounding electrode Check integrity of lighting arrestor Ensure all grounding & neutral wires are properly tightened to bus bar. 	□Ok □N/A	Resistance: Tightened connections
Service Connections: Verify the neutral, ground and power connections are secure in the controller and service cabinets. Measure and note service voltage.	□Ok □N/A	Voltage:

Task	Completed	Remarks			
 Plug-In Components Ensure all plug-in components (rack-mounted detectors, relays, load switches, etc.) fit tightly and securely. Secure plug-ins as necessary. Check for burned or pitted contacts. Replace deficient contacts. Measure incoming line voltage and amperage. Measure signal head voltage and amperage. 	□Ok □N/A	Incoming line voltage and amperage: Signal head voltage and amperage:			
Ensure circuit breakers are not loose or tripped.	□Ok □N/A	Tightened			
Inspect conduit sealant. Note deficiency and include photos.	□Ok □N/A	Deficiency noted (photos included)			
Ensure all spare conductors are landed on spare terminal blocks or are taped off.	□Ok □N/A				
Inspect cables for identification tags and landing. Tag and land unidentified cables.	□Ok □N/A	□Tagged and landed cables			
Ensure proper operation of "Test" and "Reset" buttons on GFCI type outlets. Report Faulty GFCI.	□Ok □N/A	□Faulty GFCI			
Inspect intersection records. Ensure all documentation including cabinet wiring diagrams are present and updated. Notify TSS personnel if documents are missing or outdated.	□Ok □N/A	Reported to:			
Perform police (manual) operation for each controller phase. Ensure proper operation.	□Ok □N/A				
Conflict Monitor Unit (CMU): Verify time and date are correct in any CMU with an internal clock. Update time and date as necessary.	□Ok □N/A	Updated CMU time and date info			
Inspect critical items in controller cabinet, including the controller, conflict monitor, video detectors and loop amplifier cards. Note any deficiencies.	□Ok □N/A	Deficiency noted (photos included)			
Perform conflict monitor test with the use of CMU Tester: Provide test report Replace any bad conflict monitors Deliver bad conflict monitors to the County 	□Ok □N/A	 Performed test and attached copy of test report Replaced conflict monitor unit Delivered bad conflict monitor to County PM 			
Verify correct date, time and DST function for controller	□Ok □N/A				
Check controller display panel and communications modem. Report any malfunctions to TSS personnel immediately.	□Ok □N/A	Reported to:			
Verify that all LED and LCD displays and indications on all cabinet equipment are working properly. Report any deficiencies to TSS personnel.	□Ok □N/A	Reported to:			
Meter/Service Disconnect	1	1			
Inspect physical condition of meter/service disconnect. Note any deficiencies.	□Ok □N/A	Deficiency noted (photos included)			
Preemption Devices					
Inspect and clean preemption devices (optical, sonic, etc.)	□Ok □N/A				
Check and verify timing for preemption function, if applicable.	□Ok □N/A	Deficiency noted:			
Internally Illuminated Street Name Signs (IISNS):					
Check operation of LED/ bulbs for IISNS. Replace LED/Bulbs as necessary.	□Ok □N/A				
Inspect mounting hardware. Tighten connections as necessary.		□ Tightened			
Perform nighttime check of illuminated street name signs at all signalized intersections. Note deficiencies and include photos.		Deficiency noted (photos included)			
Verify that the IISNS is adequately connected to frame, clamp and brackets, and no panel is broken or missing. Note broken or missing panels and include photos.	□Ok □N/A	Deficiency noted (photos included)			
General Verify timing charts to controllers: If they are not correct, contact the Engineer to	1	1			
verify differences.		Contacted:			
Rust: Report significant areas of rust on cabinet exterior and signal poles. Trim trees to clear all obstructions within 10 feet of traffic signal components.	□Ok □N/A	Rust			
Contractor is responsible to pull necessary permits as specified under Article 1.06 C of the General requirements.	□Ok □N/A	Removed obstruction			
Whenever the above listed items have been vandalized, rusted, oxidized, missing, frayed, defective, damaged, or have stopped functioning for whatever reason, the repairing, cleaning, or replacing will be defined as routine maintenance, therefore, no additional compensation will be made for the work above.	□Ok □N/A				
Activities that may cause the signal to go into FLASH should always be performed outside of peak hours.	□Ok □N/A				
Repairs Done or New Equipment Installed Since Last Inspection					
Document any repairs done since the previous inspection cycle and any pertinent no					