

City of Miami Beach, Florida Red Light Violation Camera Enforcement System RFP 2019-093-JC

Tab 4 Approach and Methodology

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System Maintenance

RedSpeed understands and accepts that all maintenance activities necessary to ensure the effective and consistent operation of the photo enforcement equipment (inclusive of cameras, vehicle detection sensors and ancillary equipment) shall be the sole responsibility of RedSpeed. All costs associated with electricity or other related power sources necessary to operate the systems shall also be the sole responsibility of RedSpeed.

Maintenance Procedures

The maintenance and operation of RedSpeed enforcement equipment is paramount, and the staff is dedicated to providing all customers with prompt and professional service which results in swift problem resolutions. RedSpeed provides round the clock, 365 days per year on-call operators for prompt initial response.

We intend to safeguard the operational efficiency of the City's equipment using daily operational checks, preventative maintenance schedules and proprietary site monitoring software. Drawing upon our years of experience, RedSpeed has designed a comprehensive and proven Maintenance and Support Program which will maximize the daily performance of each of the City's enforcement systems. The result will be continued issuance rates greater than 90% and system operational efficiency of 99%. In addition, the data collected thru the procedures and site monitoring software will provide valuable information to support the City's public education efforts.

RedSpeed's proposed program is comprised of three tiers:

- ✓ Preventative Maintenance,
- ✓ Daily Remote Monitoring and Response Maintenance
- ✓ Emergency Response.

It is RedSpeed's belief that a solid Preventative Maintenance Plan is critical to an enforcement program's success, allowing for the identification of potential problems before a malfunction (and subsequent downtime) can occur. These maintenance activities will be coordinated by RedSpeed's Field Services Engineering Manager and performed by RedSpeed field engineers during every site visit. A detailed rotation schedule ensures that every site is visited <u>a minimum of one time per month</u> by trained RedSpeed engineers.

Visual Mechanical Inspection conducted during a site visit includes:

Identifying and reporting of foliage or other obstructions (ie: sun glare or vandalism) that may obscure the camera's field of view or impact the capture of digital images. An example may be found below where the tree is blocking the view of the traffic signal. Field engineers are issued camera equipped cellular phones to document the obstruction. In the event an issue is identified, the field engineer will immediately email the picture of the obstruction to the engineering manager who will then notify the appropriate Miami Beach personnel.



 Visual inspection / examination of the base, pole, collar, camera and controller housing for damage, corrosion, cracks, and alignment. This inspection is to confirm the equipment is both operationally and aesthetically sound.

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- Visual inspection of all controller cabinets and camera housings to safeguard against leaks, general wear or damage.
- Visual inspection of the pole and camera housing to ensure security of all earth connections, terminations and ground rods.
- Visual examination of the ground reinstatement for the camera pole, controller, footway chambers and ducting.
- Visual inspection of the flash alignment and function. The proper functioning of the flash unit is confirmed by the technician firing the flash –observing the flash visually in addition to taking a live view image.
- Check protective finishes on all enclosures including paint, PVC and galvanizing.
- Checking security and alignment of all hinges, brackets and camera enclosure fixing bolts. Adjustments and retightening will be performed according to specified torque settings. Damaged or missing fixings will be replaced. Checking of all controller cabinet and pole housing wiring and connections.
- AC Power -The AC power will be checked using a DVM (digital voltmeter). If the incoming AC is +/- 10%, both CDOT and BOE will be immediately notified of the reading by the Field Engineering Manager.
- Verify warning or circuit identification labels are not missing, damaged or illegible. Providing new labels if required.

During the site visit field engineers will also perform the following cleaning tasks:

- Cleaning of the camera enclosure glass to maximize image clarity.
- Removing all loose dust, grime, mud, and snow if weather permits.
- Removing all labels, stickers, posters, and graffiti.
- Washing down all external finished surfaces with suitable detergent.
- Repainting of metalwork if required.
- Removing dust and dirt from the interior pole base compartment and camera housing.
- Cleaning inside the inner surface of camera and flash lens cover.
- Lubricating padlocks following the cleaning operation to help prevent locks from freezing and rusting.

Visual Inspection of Roadway and Signage includes:

- All lanes will be inspected for street deterioration such as potholes or cracking and to confirm pavement markings and striping are in good condition. Should the technician identify a concern, the engineering manager will be advised, and the appropriate City personnel notified.
- Verify all required Photo Enforced signs are correct and present.
- Visual examination of in-ground detection devices for signs of wear or damage.

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RedSpeed® SiteOps							Welco	me Mark Haylock! [Log
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Florida		e Rd & S Tam		-	-			
> Coral Gables	Information Li	ive Camera View	Monthly Maintenance	og Speed Report	Traffic Count Report Su	pport Settings		
v Sarasota	Log ID	Log Date 👻	Signage	Sensys Detection	Camera	Metalwork Inspection	Ancillary Items	Technician Name
Bahia Vista St & S Tuttle Ave E/B	-	9/6/2018	Yes	Good	Yes	Yes	Pass	Engineer 1
Bee Ridge Rd & S Tamiami Trail / US		8/8/2018	Yes	Good	Yes	Yes	Pass	Engineer 1
Beneva Rd & Fruitville Rd S/B		7/13/2018	Yes	Good	Yes	Yes	Pass	Engineer 1
Fruitville Rd & N Tuttle Ave W/B Fruitville Rd & N Washington Blvd E/E		17 207 20 20			100		1.000	Linghtoot x
Lockwood Ridge Rd & Fruitville Blvd S Tamiami Tr / US 41 & Bahia Vista St								
Tamiami Tr / US 41 & Bahia Vista St Tamiami Tr / US 41 & Bahia Vista St Tamiami Tr / US 41 & Siesta Ba PN/B Tamiami Trail / US 41 & Siest Ba Ridge Ri Tamiami Trail / US 41 & Bee Ridge Ri Tamiami Trail / US 41 & University Pi Tamiami Trail / US 41 & University Pi Tamiami Trail / US 41 & University Pi Tuttle Ave & Bahia Vista St N/B Tuttle Ave & Bahia Vista St N/B Tuttle Ave & Bahia Vista St S/B Tuttle Ave & Fruttville Rd S/B Washington Bivd & 17th St S/B Washington Bivd & Fruttville Rd N/B								

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RSI SiteOps - Checklist Preview

ite	Bee Ridge Rd & S Tamiami Trail / US 41 W/B Sit	e ID: RSFL0019				
1.	Signage: Verify presence & mounting					
	Sign 1	Yes				
	Sign 2	Yes				
2.	Sensys Detection: Verify presence, condition & operation					
	Lane 1	Good				
	Lane 2	Good				
	Lane 3	Good				
	Lane 4	Good				
3.	Gamera Lens: Check for cleanliness or damage					
	Head 1 lens cleaned	Yes				
	Head 2 lens cleaned	Yes				
4.	Metalwork Inspection: Check for damage & cleanliness Camera 1 enclosure Commo 2 enclosure	Yes				
	Camera 2 enclosure	Yes				
	IR illuminator panels (confirm operation)	Yes				
	Pole	Yes				
	Base	Yes				
	Collar	Yes				
	Street cabinet or pole mounted enclosure	Yes				
5.	Ancillary Items: Check functionality & damage					
	Voltages & Grounding	Pass				
	Traffic signal & aspect phasing interface module	Pass				
	USB Sensys interface module	Pass				
	PC module	Pass				
	PL module	Pass				
	Communications (modern/POE switch/router)	Pass				
	Communications (modern/POE switch/router)	Pass				

https://siteops.redcheck.org/1.7/CheckListPreview.aspx?Id=5747

10/8/2018

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Disaster Recovery Plan

Recognizing that emergencies do not always occur during normal business hours, RedSpeed will establish a 24/7 engineering support hotline specifically for use by City of Miami Beach authorized personnel. This communication channel is available to address any service requests from a simple service disruption to a total system knockdown.

Since all systems are being continuously monitored via RedSpeed's system monitoring utility, if a malfunction at an individual site is detected the on-call Field Services Engineer will immediately advise the appropriate City personnel of the incident and will advise the steps that will be taken to correct the situation.

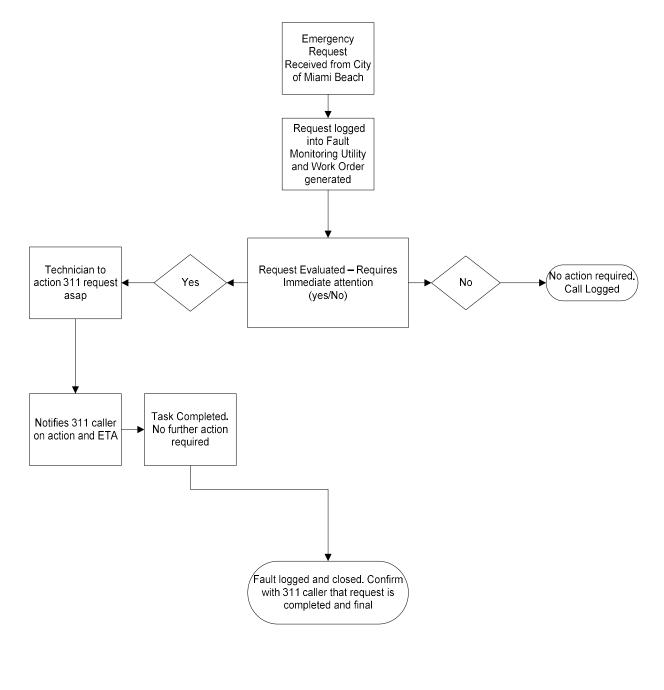
The table below identifies some common Client requests and RedSpeed's committed response time.

PRIORITY REQUESTS	RESPONSE TIME
Knockdown – Make safe	During Normal Business Hours – 2 hours max After Hours – Within 4 hours
Knockdown – Repair & Reinstatement to full operational status	Within 72 hours
311 Requests- Managed ASAP	According to request (Urgent)
Routine Daily Maintenance Repairs	Within 2 – 8 hours
Disruption in service of any system malfunction	Within 24 Hours
Street cable replacement	Within 48 hours
Sign Replacement	Within 48 hours
Remove Graffiti and Touch-up Equipment	Within 48 hours

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Emergency Response Flow Chart

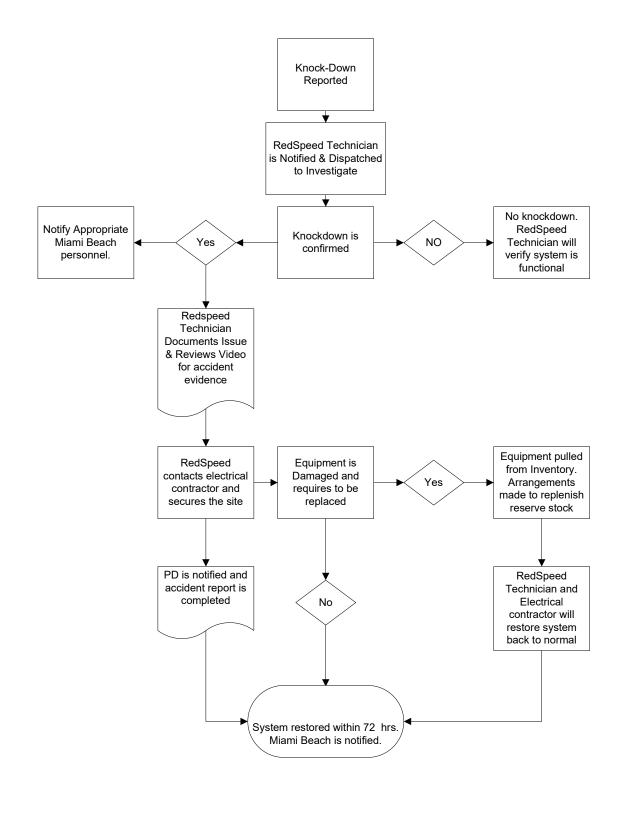
Upon receiving the City's call or email request, the on-call field engineer will take down the pertinent details and immediately document the request within the Fault Monitoring Utility to generate a work order. If the request is relative to the operation of a site, the field engineer will work to identify the source of the problem and determine if the problem can be corrected remotely. If a remote correction is an available option, the field engineer will take the necessary steps to restore the site's functionality and advise the requesting party once the work is completed.



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Knockdown Procedure Flow Chart

During a critical situation such as a knockdown, RedSpeed understands that nothing less than an immediate response is acceptable. The following flow chart demonstrates RedSpeed's action plan for these instances. Working in cooperation with the relevant Miami Beach departments and our partner subcontractors, RedSpeed will guarantee the downed systems will be replaced and restored to full operational capacity within 72 hours.



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Municipal Personnel Training

RedSpeed believes the success of the program is dependent upon every authorized municipal agent involved having a thorough and solid understanding of all operational elements of the Red-Light Enforcement program. As such, top priority will be given to ensuring authorized personnel involved with the City's program will receive customized training that addresses each core component of the RedCheck[™] and SiteOps[™] systems. Special focus will be placed upon ensuring the individuals authorized to approve the issuance of a ticket are knowledgeable in the criteria required under both Florida Law as well as the City of Miami Beach Light Camera Ordinance.

Beginning with an initial "Business Rules" meeting to outline RedSpeed's project approach, no aspect of the program is overlooked without full disclosure and discussion.

Business Rules Topics include:

- FDOT constraints and timelines
- > Launch Schedules locations, dates, Warning period, public awareness campaign
- > Equipment what equipment will be supplied, installation guidelines, Training
- Violation Review Initial screening (if City prefers RedSpeed violation review personnel conduct an initial screening), Officer review and approval / rejection, Notice mailing
- Hearing Process existing process, role of City, clerks, payment process, scheduling, and violator notification
- Revenue Collection and Reporting Various methods of submitting payment, reconciliation of payments and funds disbursements to City.

Site Visit:

The RedSpeed Project Manager will take City personnel out to an enforced intersection to familiarize them with the system's hardware:

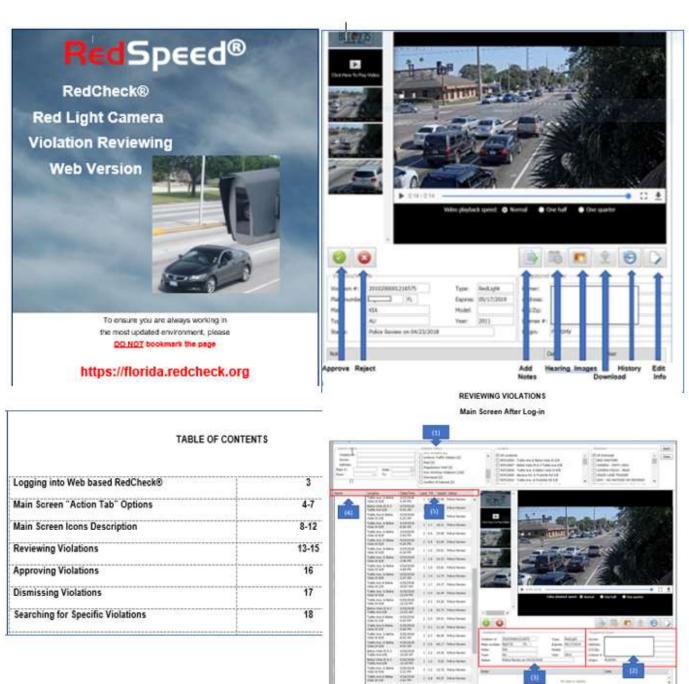
- Camera Enclosure
- Vehicle Detection
- Processor
- Pole
- Electric connections
- Placement of Required Signage



- On-site, classroom style training, in addition to one-on one hands-on instruction, will be conducted by a RedSpeed representative, with all necessary training materials provided by RedSpeed.
- On-site training will be provided at no cost for as many individuals as the City requests, to ensure all personnel are fully versed on the system. Scheduling will be based upon the most convenient times for City personnel.
- Major topics within RedCheck[™] include navigating the violations summary and details screen to access violations, approving and rejecting violations and generating the various customized reports available thru the system.
- This training will be supplemented by on-going support and additional "refresher courses" for existing personnel, as well as training for new personnel as needed.
- SiteOps[™] training will explore the many facets of the system. Personnel will learn how to utilize the Live View module and the steps involved with accessing and downloading archived video footage.
- Ongoing support for all municipal users will be provided by the same individuals providing the training.

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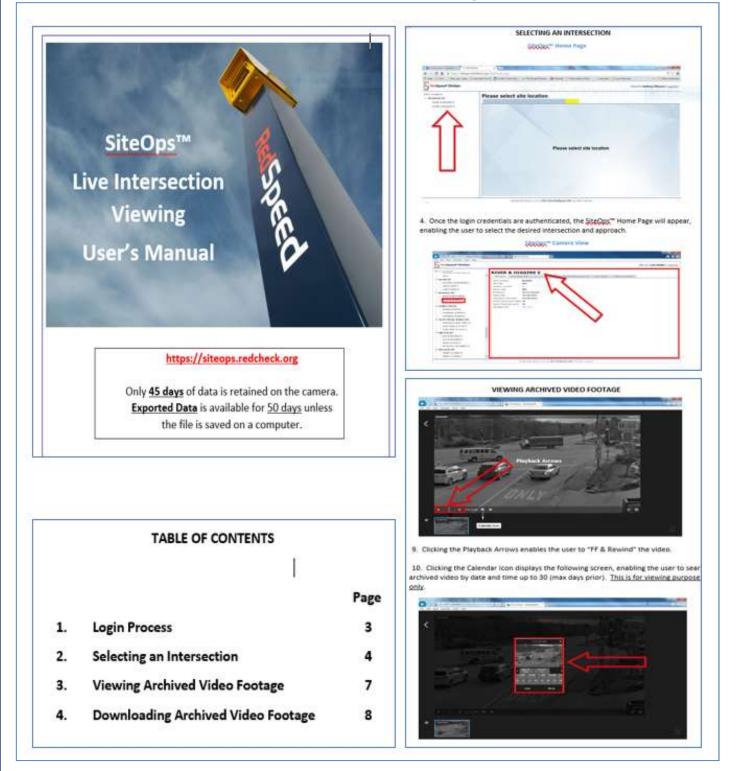
These individuals will be available at any time to address any of the City's questions or requests. RedSpeed provides detailed, screen-by-screen function related training materials for all City personnel. As staff adjustments are made, RedSpeed will provide additional materials to ensure all active participants in the program have their own reference manual. Upon request, refresher training will be provided for both existing and new personnel at no cost to the City.



Sample Violation Reviewer User Manual

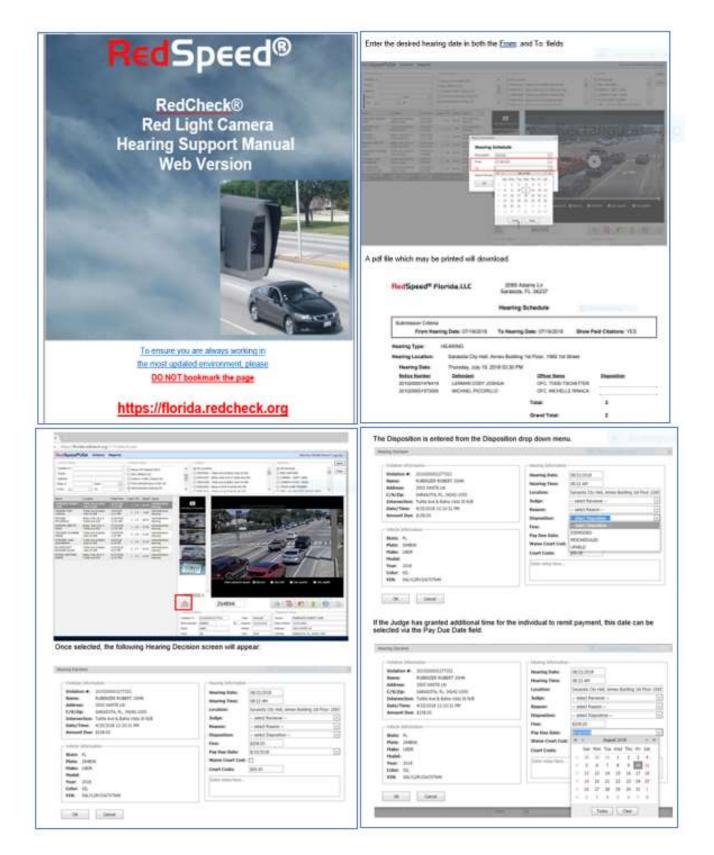
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Sample SiteOps Live Intersection Viewing User Manual



RedSpeed® Florida,LLC City of Miami Beach, Florida Red Light Violation Camera Enforcement System RFP 2019-093-JC

Sample Clerk of Court User Manual



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Project Management Approach

The project management approach is truly a partnership between the City of Miami Beach and RedSpeed. While local officials bring an intimate knowledge of the City's specific issues and traffic enforcement needs, RedSpeed will provide the technical expertise and strategic plan for executing the City's vision in a timely and efficient manner.

Utilizing the tried and true method which has successfully launched over 60 programs in Illinois, the dedicated Florida based Project Manager will initiate a Business Rules meeting with the various City department which will play an integral part in the program. These departments include the Police department, Public Works and the Courts. As the City's objectives, concerns and ideas are clarified the next phase will be for RedSpeed Engineering specialists to visit the existing enforced locations to determine the most efficient camera equipment transition approach as well as identifying any potential new locations for enforcement. Consideration will be paid to lane and traffic configurations, compliance with FDOT guidelines, easements, location of power supply etc.

While the Engineering team is evaluating the physical elements of the installation, the Program Manager will be working closely with the City and a RedSpeed Client Relations Specialist to finalize all "Back Office" requirements, from preparation of required forms to Violation Citation approval, training materials and public awareness campaign specifics.

Throughout the process the City will be kept apprised of every step being taken.... further solidifying the fact that this traffic safety program is truly a partnership between RedSpeed and Miami Beach.

Transition / New Installation Timelines for Traffic Infraction Devices

RedSpeed has many years' experience assisting communities who have chosen to partner with RedSpeed and terminate the relationship with their existing enforcement provider. RedSpeed encourages active communication with our customers from the initial project launch meeting through all follow-up meetings. Upon being selected a Project Manager is immediately assigned to the City, where this individual will remain

the primary contact before, during and completing the equipment installation. The City will not be handed off thru countless personnel. The transition process is very straightforward, and the Project Manager would guide the City through the entire process.

SEQUENCE OF EVENTS – Takeover of Existing Traffic Infraction Device Locations

- 1. City of Miami Beach sends a formal letter of termination of the existing red-light camera contract to the current vendor via Certified Mail Return Receipt Requested.
- 2. The City will provide written notification (template form provided by RedSpeed) to the Florida Department of Motor Vehicles and Nlets indicating RedSpeed is acting as an agent for the City of Miami Beach for the purpose of accessing vehicle registered owner information.
- 3. For intersections under FDOT control, once the termination notice is received by the current vendor, RedSpeed will commence submitting all required paperwork to FDOT including:
 - Site Engineering/Installation plans,
 - Copy of the new executed Red-Light Enforcement contract between the City of Miami Beach and RedSpeed,
 - Copy of the termination letter submitted to the previous vendor, copy of the Certified Receipt confirming delivery and confirmation the old contract has been terminated.
- 4. The exiting Vendor must submit the following to FDOT:
 - Equipment removal plans,
 - Copy of the termination letter issued by the City of Miami Beach,

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- Copy of the terminated contract between the vendor and the City
- 5. Upon receipt and review of all required paperwork, FDOT issues a Removal Permit to the exiting Vendor, as well as general use permit/bond forms to the new Vendor (RedSpeed).
- 6. RedSpeed will coordinate with Automated Traffic Solutions (if agreeable) to remove the existing metalwork and deliver it to a predetermined location indicated by ATS. Automated Traffic Solutions technicians would of course be responsible for the removal of any proprietary electronic components.
- 7. RedSpeed installs the new, state-of-the-art photo enforcement equipment and conducts the Operational Systems Acceptance test for approval and sign off by both RedSpeed and the City.
- 8. FDOT will conduct final inspection of each installation and provide sign off.
- 9. Sites will go live and begin pre-established Warning Period supplemented by Public Awareness Campaign.

Note: Our timeline assumptions are based on the expediency of all 3rd parties, including FDOT, Miami-Dade County, power utility, Comcast, Caltran Engineering and A.U.M. Construction, Inc.

Municipality Prep (Concurrent Activity)

1.	Contract executed	1 week
2.	Business rules review	
З.	City of Miami Beach provide FDOT permit support letter for all cameras	
4.	Formal termination letter sent to existing vendor	
5.	Agree with current vendor to take over existing in-ground infrastructure (i.e. bases,	
	power connections, traffic light connections)	
FD	OT/Miami-Dade County Permits	
1.	Site meeting with civil engineering contractor	4 Weeks – 6 Weeks
2.	Commission engineering plans	
З.	Power connection order (New locations only)	
4.	Order Comcast high-speed landline (use cellular modems to launch or where	
	landlines not available)	
5.	Plans approval/Construction permit issued	
Fie	eld Technology	
1.	Contractor installation and refit phase of existing camera foundations and in-ground	4 Weeks – 6 Weeks
	power and traffic light connections	
2.	Ducting, foundations & traffic signal controller inter-connect for new locations	
З.	Communication construction and pedestal installation (Independent resource –	
	Timeline not affected by delays)	
4.	System installation & calibration	
5.	FDOT Turn-On Inspection	
Ba	ick Office Setup (concurrently after municipal prep)	
1.	Create user accounts & roles	1 Week
2.	Set up notices and letters	
З.	Set up toll-free number and updated phone system	
4.	Update Phone System	

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Once the City has approved the partnership with RedSpeed, a City Project Manager who will be RedSpeed's primary point of contact should be appointed. This individual will be responsible for advising RedSpeed's Project Manager of the City personnel who also will be assigned to the program, and ensure they are available for the Business Rules Meeting, status update meetings and applicable training sessions. It is expected RedSpeed also will have reasonable access to the City's facilities for testing. The City should budget the following time allocations for training of City personnel:

Group	Number of City Staff	Hours Projected hours are In-Person with a RedSpeed representative. Training will be provided at no charge throughout the duration of the contract to ensure any new personnel assigned to the program are fully trained. Upon completion of the training attendees will be issued a Certificate of Completion and Proficiency.
Finance Department	3	2-3 hrs.
Court administration	2	2-3 hrs.
Police administration	3	2-3 hrs.
Police infraction review	8	2-3 hrs.
Total	15	These times are approximate. Training will continue until all personnel are fully confident in utilizing the system.

Public Awareness / Public Forum Support

RedSpeed will provide continuous public awareness support to the City throughout the duration of the contract. At the City's request, representatives will be available for presentations to Public Safety Groups to assist City personnel in demonstrating how the camera enforcement equipment is utilized. Recognizing community support is cultivated thru ongoing updates regarding the program's safety contributions, RedSpeed will provide Public Awareness support and materials to Miami Beach throughout the duration of the contract.

These materials are designed to educate the community about the objectives of the Red-Light Photo Enforcement Program and its ability to improve safety (and benefit all residents) by changing driver behavior. The continuous dissemination of accurate information will ensure continued community support and eliminate the potential for speculation and misinformation.

Media materials will include:

- ✓ Print News and Social Media Releases announcing the City's decision to continue utilizing Red Light Enforcement technology,
- ✓ Overview of how Red-Light Enforcement Systems work and the Safety benefits they provide,
- ✓ Press Releases advising Warning & Live Violation Activation Dates for individual intersections,
- ✓ Inserts to accompany Violation Mailings,
- Miami Beach specific "Frequently Asked Questions" document to compliment those already posted on municipal website.
- Map detailing the locations at which Photo Enforcement is being utilized to be posted to the City's website.
- ✓ Posters urging residents to "Use Your Head…Stop on Red" for display throughout the community. These posters will also direct residents to the City's website for additional information and FAQs.

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Merchant Processor

RedSpeed agrees to give first consideration to utilizing the City's current gateway and merchant processor and agrees to utilize the City's current banking services for receipting.