




# MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating Procedure	SOP #	Date:	Page 1 of 10
Operations Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>			

Classifications: <b>OCC – Rail Dispatchers – Maintenance of Way - Contractors</b>
Other Departments: <b>Real Estate – Operation – Safety - Risk Management - Engineering &amp; New Systems Development</b>
Issued by:  Chief of MetroLink Operations
Supersedes: SOP 101.17 dated November 12, 2007

## **I. PURPOSE AND SCOPE**

The purpose of the following requirements is to maintain a safe environment and efficient transit system for MetroLink customers, employees and Contractors when work is being performed on the MetroLink Right-of-Way (ROW).

The following procedures must be followed and all requirements fulfilled before permission will be granted to any individual or group requesting access to the MetroLink Right-of-Way (ROW) to perform work. This includes all work on, under, above, or adjacent to the MetroLink Right-of-Way that has the potential to impact train operations. MetroLink Right-of-Way is defined as Metro owned property along MetroLink's Light Rail System, including main line tracks, yard track, shop tracks, and stations. Work performed on the Right-Of -Way outside of the alignment or area where trains operate that **will not** impact train operations, e.g. park and ride lots etc., is excluded from the scope detailed in the following procedures.

This procedure is applicable to Contractors and Metro Employees.

MetroLink Land Maps defining Metro property lines and a MetroLink Alignment Schematic are available from the Maintenance Of Way (MOW) Department upon request.

## **II. ATTACHMENTS/EXHIBITS**

- EXHIBIT A: MetroLink - Contractor Right-of-Way Temporary Work Permit
- EXHIBIT B: Metro Permit Fee Schedule
- EXHIBIT C: MetroLink Alignment Schematic (available upon request)
- EXHIBIT D: Indemnification Agreement and Required Insurance Coverage
- EXHIBIT E: Metro Personnel Right of Way Work Permit (For Metro Employees Only)
- EXHIBIT F: MetroLink Rail Systems Department Employee Safety Standards (available upon request)
- EXHIBIT G: Operations Rule Book (available upon request)



## MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating	Procedure	SOP #	Date:	Page 2 of 10
Operations	Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>				

### **III. DEFINITIONS**

**Flag Person** is a Tier 2 qualified Contractor or Metro Employee that is assigned as a dedicated flagger to protect work crews, personnel, and equipment working on or near the tracks to ensure safe passage of trains as described in SOP 103.04.

**Fouling a Track** means placement of an individual, material or equipment in such proximity to the track that the individual, material or equipment could be struck by a moving train or on-track equipment, or in any case is within 8' 6" from the centerline of nearest track.

**Lookout** is a Tier 2 qualified Metro employee who is qualified to provide warning to ROW workers of approaching trains or on-track equipment. Lookout should be equipped with the necessary equipment to warn ROW workers of approaching trains, as well as flagging equipment to be used if it is necessary to warn approaching trains. The Lookout's sole duty is to look for approaching trains or on-track equipment and provide advanced warning to employees before arrival of the trains or on-track equipment.

**No Clearance Zone** areas along the MetroLink Right of Way where there **is not** 8' 6" clearance from centerline of nearest track to nearest fixed object, e.g. wall, fence, bridge, steep embankment. Within these areas it **is not** possible for personnel to safely clear from fouling train movement. These areas are designated with reflective **No Clearance** signs on the right-of-way and by markings on the MetroLink Alignment Schematic.

**Operating Right-of-Way (ROW)** is the area within twenty (20) feet of the centerline of any track on the main line or yard.

**Pilot** is a Tier 3 qualified Metro employee assigned to facilitate track car or on-track equipment movement when the operator or driver is not qualified on the physical characteristics or rules of the portion of the alignment over which movement is to be made. The pilot will be responsible for the safe movement of on-track equipment for the work crew to which they are assigned.

**Right-of-Way (ROW)** is land, property and interests therein, acquired by the Agency.

**Train Detection** is a procedure by which a worker acquires ROW access safely by seeing approaching trains and leaving the track before the train arrives at the location at which they are working and which may be used only under certain conditions authorized by OCC.

### **IV. GENERAL REQUIREMENTS FOR ACCESS TO METROLINK RIGHT-OF-WAY**

1. To access the MetroLink ROW all Contractor and Metro Employees must have a minimum of Tier 1 Safety Training and each work group must be accompanied by at least one person that is Tier 2 qualified to serve as a flag person or lookout.

For unforeseen work for short durations, MetroLink Operations may authorize unqualified persons access to the ROW if accompanied by a qualified Metro Lookout.



# MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating	Procedure	SOP #	Date:	Page 3 of 10
Operations	Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>				

- The work crew must have in their possession a copy of an approved work permit describing the work being performed. Contractor must also meet all additional requirements for ROW access described within this SOP and the referenced documents. Prior to the start of any proposed work the Contractor must submit a MetroLink - Contractor Right-of-Way Temporary Work Permit, and Metro Employees must submit a Metro Personnel Right of Way Work Permit. If Metro requires a detailed work plan, that plan must be approved prior to permit submittal. Once the work plan is approved, the permit can be submitted.

For unforeseen work for short durations, MetroLink Operations can authorize access to the ROW without an approved work permit.

Work permits are not required for LRV equipment maintenance performed on the mainline or in the yard & shops.

- Operators of track cars or on-track equipment must be Tier 3 qualified, unless a qualified Metro Pilot accompanies them. In that situation, the Operator must be at a minimum, Tier 1 qualified.
- A Metro Tier 3 qualified pilot must accompany Contractor track cars. The pilot is responsible to ensure the Contractor's track car and on-track equipment is operated in compliance with Metro operating and safety rules. The contractor requirement for the Metro pilot can be waived by Metro, if it has been determined that the Contractor's operator has sufficient experience with Metro operating and safety rules.

## **V. ROW SAFETY TRAINING QUALIFICATIONS**

The following table summarizes the required ROW Safety Training necessary before any Contractor or Metro Employee will be allowed to perform any work on the ROW. Annual recertification is required for Tier 1, 2 & 3 Training.

<b>Work or Duties</b>	<b>Training Required</b>
Any work within MetroLink Right-of-Way	Tier 1
Flagging to protect work crews, personnel and equipment in the Right-of-Way	Tier 1, and Tier 2
Operating a track car on MetroLink	Tier 1, Tier 2, and Tier 3

If Metro employees are not qualified at a minimum Tier 2 (Flagging and Radio Use), they must be escorted by another employee qualified to Tier 2.

*The Safety Department will maintain a list of ROW Safety Trained qualified persons and their level of qualification (e.g. Tier 1, 2, or 3). An updated list will be kept on file in the Rail Dispatcher's Office. Dates, times and locations of Training class can be obtained by contacting Metro Safety Dept. or MetroLink Operations.*

## **VI. METRO REQUIREMENTS FOR CONTRACTOR**

- Contractor must, if requested by Metro, submit a detailed work plan to MetroLink Operations to be



# MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating	Procedure	SOP #	Date:	Page 4 of 10
Operations	Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>				

reviewed and approved by MetroLink Operations, Maintenance of Way, and Safety. After acceptance of the work plan, Contractor will obtain, through the procedure defined in this SOP, an approved **EXHIBIT A: MetroLink - Contractor Right-of-Way Temporary Work Permit** before any work can be performed and they must have their Metro approved Permit available at all times on the work site.

2. Contractor may be required to reimburse Metro for all expenses as defined in EXHIBIT B: Metro Permit Fee Schedule. **Metro reserves the right to waive fees at its sole discretion.**
3. Method of payment from Contractor to Metro will be determined by Metro. All Metro expenses for a particular Contractor shall then be accumulated under the associated permit number.
4. Contractor will complete annual required ROW Safety Training as described in **Section V - ROW SAFETY TRAINING QUALIFICATIONS**. Annual recertification is required for Tier 1,2 &3 Training.
5. Contractors will immediately stop any work that deviates from their approved Right-of-Way Temporary Work Permit or detailed work plan submitted. Metro should be contacted and must approve any alternate work procedures.
6. Contractor work activities can be terminated immediately by MetroLink Operations, Maintenance of Way or Safety, at any time without notice. Typical conditions under which this may occur include, but are not limited to:
  - a) Failure to comply with any of the requirements identified in this SOP or other documents referred to within.
  - b) Safety related reasons.
  - c) Operations schedule-related reasons.
  - d) If work in progress deviates from the written work proposal approved by the Metro.
  - e) Flag person(s) not available.
  - f) Contractors' work interferes with the constant, continuous use of the tracks, property and facilities of MetroLink system, its employees, its customers or other Contractors working within the right-of-way.
  - g) Accidents, injuries, near misses, or vehicle damage.
  - h) Metro rule violations
7. All on track equipment (including Hi-Rail Vehicles) must meet Federal Register 49 CFR, Part 214 standards, related to Roadway Maintenance Machine Safety. Contractor will be required to submit a list of qualified operators and which Roadway Maintenance Machines that they are qualified to operate on Metro. The Contractor will provide, for Metro approval, documentation of their training and qualification process.
8. Contractor must satisfy all safety requirements including, but not limited to, those found in Exhibit F: METROLINK RAIL SYSTEMS DEPARTMENT EMPLOYEE SAFETY STANDARDS dated January 1996 and Exhibit G: MetroLink Operations Rule Book. Copies are available upon request from the MOW Department.
9. Under no circumstances will Contractor access tracks with vehicles, equipment, or machinery, without explicit written permission of Metro. Each individual working on the ROW is responsible to



# MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating	Procedure	SOP #	Date:	Page 5 of 10
Operations	Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>				

supply their own personal protective equipment, including a reflective safety vest, hard hat, safety glasses, and work shoes with less than ½ inch heels (open toe or heel shoes are prohibited).

10. These requirements should be followed for excavations:

- Excavations to either side of tracks must be at least **twenty feet** from the centerline of track.
- Excavation under, between or within the track structure or the removal of ballast is prohibited unless approved by Metro.
- Under-track cable installations must be directionally bored using the following procedures.
- A minimum depth of 8 feet below top of ties shall be maintained at all times or 8 feet below flow line of ditch, whichever is greater, must be maintained to top of conduit(s).
- Conduit schedule Fiberglass Reinforced Epoxy (FRE) or equivalent is required.
- Excavations within 5 feet of either side of buried MetroLink signal, power, and communication cables must be performed by hand digging and with MOW personnel present at the dig site.
- When cable work is being performed parallel to MetroLink right-of-way, cables shall be laid at the same depth as MetroLink cables. The location of the cables shall be between MetroLink cables and the property line, **not** towards the track.
- If cable locates are required the Missouri One Call System, Inc. locate procedure for Missouri and Julie, Inc. procedures for Illinois must be followed.

***Note:** Any deviation from these requirements will only be allowed with written consent from Metro.*

11. Over-track crossings will be considered on a case-by-case basis. All over-track crossings must comply with both National Electric Safety Code (NESC) clearances and any MetroLink requirements imposed.

12. Contractor shall only enter MetroLink Right-of-Way with an approved Work Permit, unless otherwise approved by MetroLink Operations.

**13. Work performed by a Contractor on MetroLink Right-of-Way within 20 feet of the centerline of a main line or yard track will require a Temporary Restriction to be issued on the Daily Operating Clearance.**

14. If the Contractor is performing work outside of 20 feet of the center line of any main line or yard, and it is possible for equipment e.g. boom, or hoisted equipment etc, to foul the operating ROW or has potential of making contact with the catenary, a temporary restriction will be required.

15. The temporary restriction will require a dedicated flag person to provide flag protection for the work crew(s). Speed Restriction Signs will need to be posted to identify the work zone to approaching trains. Refer to SOP 103.04 for more information on flagging requirements.

16. In the event that the Contractor disturbs, or modifies Metro's property in any manner, the Contractor must restore the property to the same condition it was in before the Contractor performed work. Such restoration must be to the satisfaction of the Superintendent of Operations and the Superintendent of Rail ROW Maintenance. Contractor will be billed for all work required to restore property to original condition.



## MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating Procedure	SOP #	Date:	Page 6 of 10
Operations Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>			

17. Contractor must comply with all applicable federal, state, and local laws, regulations, and standards affecting their work.
18. As a limitation to any rights or licenses that may be granted to the Contractor, Metro reserves the right to use and maintain its entire property. This includes Metro's right to construct, maintain, repair, renew, use, operate, change, modify, or relocate railroad tracks, roadways, station platforms, signal, communication, fiber optics, power, or other wire lines, pipelines and other facilities upon, along or across any or all parts of its property. All or any of the above mentioned use and maintenance may be done at any time or times by Metro without liability to the Contractor or to any other party for compensation or damages.
19. The Contractor is required to comply with Metro's Exhibit D "Insurance Specifications for MetroLink Contractors"
20. Metro reserves the right to fully investigate all Contractor accidents, injuries, near misses, or vehicle damage and the Contractor and its employees agree to comply and assist Metro in all aspects of these investigations. This includes, but is not limited to, drug and alcohol testing, employee interviews, written reports, and requests for documentation.

Contractor employees who work on the MetroLink ROW will be required to comply with the Metro Drug and Alcohol Policy

### **VII. CONTRACTORS PROCEDURE TO ACCESS METROLINK R.O.W.**

1. Contractor will request a Right-of-Way Work Permit packet of information from:

**Control Center Manager  
MetroLink Operations  
700 South Ewing  
St. Louis, MO 63103  
314-982-1400 X2851  
[rowworkpermits@metrostlouis.org](mailto:rowworkpermits@metrostlouis.org)  
Fax 314-335-3429**

2. MetroLink Operations will distribute SOP 101.17 with Exhibits A, B, and D to the Contractor. Contractor may request Exhibits C, F, and G. Exhibit E is for Metro employee use only.
3. Contractor then submits their Permit Application Fee and MetroLink Contractor Right-of-Way Temporary Work Permit (Exhibit A). All other required documents should be submitted a minimum of 14 days prior to their proposed start date. This may include a detailed work plan and project drawings, indemnification agreement and required insurance coverage as described in the Description of Insurance Specifications (Exhibit D).
4. MetroLink Operations distributes Permit and detailed work plan if required, to Real Estate, Risk Management and Safety Departments for approval and facilitates a pre-project planning meeting with Contractor(s).



## MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating Procedure	SOP #	Date:	Page 7 of 10
Operations Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>			

5. MetroLink Operations contacts Contractor with approval, permit number and necessary requirements for Tier 1-3 safety training. Permit numbers are assigned by MetroLink Operations as described in SOP 101.23.
6. Contractor completes required safety training:
  - Tier 1 Training: Persons working on or next to the MetroLink Right-of-Way.
  - Tier 2 Training: Flagging and Radio Use.
  - Tier 3 Training: Track Car Operation and Operating Rules

### Notes:

1. *Contractors are required to be trained at a minimum of Tier 1 to enter ROW. All work performed by the Contractor on the operating ROW must be protected by a qualified flag person. An unqualified Contractor may be authorized to enter the alignment by Operations if escorted by a Metro Lookout.*
2. *Operators of track cars or on-track equipment on the MetroLink light rail system must be qualified to Tier 3, unless they are to be piloted by a qualified Metro Pilot (in this case, the Operator will be Tier 1 qualified at a minimum). A Metro Tier 3 qualified Pilot is required to direct the operation of Contractor's track cars and on-track equipment, unless otherwise approved by Metro.*
7. Contractor **track cars must be piloted by a Metro Pilot qualified to Tier 3 of safety training.** The pilot will communicate with OCC and control the movement of track cars or group of track cars assigned to a single work crew. The Metro Pilot will be responsible for the safe movement of the on track equipment or track cars. The Metro Pilot requirement may be waived by Metro if it is determined that the operator has sufficient training and experience on the MetroLink alignment to safely operate track cars and on-track equipment, and the Operator is Tier 3 qualified.
8. Contractor submits Right-of-Way Temporary Work Permit (Exhibit A) with permit number no later than **Wednesday 12 Noon**, prior to the week the work will be accomplished. Permit must be resubmitted every week during the length of the proposed project.  
  
**Note:** *If there is a Metro recognized holiday on Thursday, the work permits are due on Tuesday 12 Noon.*  
  
**Note:** *If the project proposal changes significantly, a new MetroLink Right-of-Way Temporary Work Permit (Exhibit A) must be submitted. A new Permit Number will be assigned after the Permit is approved.*
9. Contractor or a Metro Designee is required to attend weekly Track Allocation meeting scheduled for Thursday with MetroLink Operations and Maintenance of Way to respond to questions regarding proposed work. The Contractor's Metro Designee may represent the Contractor at this meeting if previously arranged.



## MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating Procedure	SOP #	Date:	Page 8 of 10
Operations Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>			

**Note:** When the week includes a Metro recognized holiday on Thursday, the Track Allocation Planning meeting is scheduled for Wednesday.

All work requests are subject to Metro Approval

**Note:** Scheduling of work activities is subject to availability of Maintenance of Way, Operations and Safety personnel, as well as the effect it will have on customer service based on the impact the proposed work has on service quality and train schedules.

### **Restriction Times**

Generally, work requiring a temporary restriction will be allowed to start at 7:30 AM daily. Some work will be restricted to the after revenue service hours approximately 1:30 AM to 3:30 AM.

10. Metro Project Manager or MetroLink Operations will provide the Contractor with a copy of their approved temporary permit (Exhibit A), which must be available on the project site at all times during work activities to confirm permission to occupy MetroLink Right-of-Way.
11. Contractor must contact OCC and request permission prior to accessing the ROW. OCC has authority over all activity along the ROW at all times.
12. Once work is complete, and the work area is cleared of materials, equipment, tools, and personnel, the Contractor must contact OCC to confirm that they are clear of the ROW.
13. Metro provides Contractor an invoice for appropriate fees upon completion of the work or on a monthly basis as necessary.
14. Contractor submits payments to the Metro Accounts Receivable.

### **VIII. METRO EMPLOYEE REQUIREMENTS AND PROCEDURE FOR ACCESS TO RIGHT-OF-WAY**

This procedure is to be used by all Metro Departments to receive temporary permit access to Metro Right-of-Way.

1. Submit completed Exhibit E: Metro Personnel Right-of-Way Work Permit to MetroLink Operations.
2. Permits reviewed and approved at weekly Track Allocation meeting by MetroLink Operations and Maintenance of Way.
3. MetroLink Operations publishes the Final Track Allocation for the following week and all revisions.
4. For unforeseen work such as emergencies or to perform minor corrections or routine inspections, OCC can authorize a Tier 2 Qualified Metro Employee to access the track without an approved permit.





## MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating Procedure	SOP #	Date:	Page 9 of 10
Operations Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>			

5. Work performed by an employee on the Operating ROW within 20 feet of the center line of an in service main line or yard track will require a Temporary Restriction be issued on the Daily Operating Clearance. Exceptions to the temporary restriction requirement for employees can be granted under the conditions listed in Item 6.

The temporary restriction requires a dedicated flag person be utilized to provide flag protection of the work crew(s). Speed Restriction Signs may need to be posted to identify the work zone to approaching trains. Refer to SOP 103.04 for more information on flagging requirements.

6. Work performed by Tier 2 qualified Metro employee does not require the issuance of a Temporary Restriction if one of the following Train Detection schemes is used:

a. *Worker(s) Use Train Detection to Clear Operating ROW 15 seconds Prior to Arrival of Train*  
Train approach warning shall be given in sufficient time to allow worker(s) to move to and occupy a prearranged place of safety outside of the Operating ROW (more than twenty (20) feet from the centerline of any track on the main line) not less than 15 seconds before a train moving at maximum authorized speed can pass the location of the worker(s).

The following four conditions must be met:

1. Where worker(s) are performing minor corrections or routine inspections.
2. Where no power tools or equipment are being used in hearing range of the worker(s).
3. Where worker(s) are performing tasks that allows them to be attentive to train movement.
4. Where the ability of the worker(s) to hear and see approaching trains is not impaired by background noise, lights, precipitation, fog, passing trains or other obstructions or physical conditions.

***If all four conditions cannot be met, a Lookout must be assigned to provide the worker(s) warning of approaching trains.***

Trains can pass the location of the worker(s) at maximum authorized speed if worker(s) have cleared outside the Operating ROW.

b. *Worker(s) Use Train Detection to Clear From Fouling a Track 15 seconds Prior to Arrival of Train.*  
Train approach warning shall be given in sufficient time to allow worker(s) to move to and occupy a prearranged place of safety so that employee(s) or equipment are not fouling any in-service track (more than 8' 6" from the centerline of nearest in-service track) not less than 15 seconds before a train moving at maximum authorized speed can pass the location of the worker(s).

The following four conditions must be met:



# MetroLink Operations

700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating	Procedure	SOP #	Date:	Page 10 of 10
Operations	Department	101.17	April 8, 2009	REVISION
Title: <b>WORK PERFORMED ON METROLINK RIGHT OF WAY</b>				

1. Where worker(s) are performing minor corrections or routine inspections.
2. Where no power tools or equipment are being used in hearing range of the worker(s).
3. Where worker(s) are performing tasks that allows them to be attentive to train movement.
4. Where the ability of the worker(s) to hear and see approaching trains is not impaired by background noise, lights, precipitation, fog, passing trains or other obstructions or physical conditions.

***If all four conditions cannot be met, a Lookout must be assigned to provide the worker(s) warning of approaching trains.***

Trains must pass the location of the worker(s) at restricted speed if worker(s) have cleared so that they are not fouling the track, but have not cleared off of the Operating ROW. OCC must contact a minimum of the next two approaching trains on the affected track before authorizing work or movement in this area. If work is for an extended time period, OCC will notify approaching trains as necessary to protect the workers.

7. Working in a No Clearance Zone.

**WARNING**

**Areas marked as NO CLEARANCE do not provide sufficient space for worker(s) to move to and occupy a prearranged place of safety so that employee(s) or equipment are not fouling any in-service track (more than 8' 6" from the centerline of nearest in-service track) not less than 15 seconds before a train moving at maximum authorized speed can pass the location of the worker(s).**

**No Clearance Zone** is an area along the Operating ROW where there is not 8' 6" clearance from centerline of nearest track to nearest fixed object, e.g. wall, fence, bridge, steep embankment. Within these areas it is not possible for personnel to safely clear from fouling train movement. These areas are designated with reflective "No Clearance" signs on the Operating ROW and by markings on the MetroLink Alignment Schematic.

**To access a No Clearance Zone, a temporary restriction must be issued for BOTH tracks.**

For unforeseen or emergency situations, OCC can authorize entry into No Clearance Zones for short durations without the issuance of a temporary restriction, but the following steps must be taken:

1. Train operation must be temporarily stopped on the track(s) in the area where the worker(s) will be located.
2. Normal Train operation in the affected area cannot resume until OCC is advised by the worker(s) that they are no longer fouling the track on which the train will operate.
3. Trains must pass the worker(s) at restricted speed, if personnel remain within the Operating ROW.