

Roadway Worker Protection Program

UTAH TRANSIT AUTHORITY



Applies to all UTA Rail Services:

TRAX/Streetcar

FrontRunner

Revision Table

Revision Date	Description of Revision	Responsible Party
4/26/2008	Not recorded.	Ron Nickel
3/28/2013	Update of contacts, layout of document, references to GCOR.	Max Hanna
9/1/2013	Update of contacts, description of system, definition of "controlled," references to Construction Safety and Lessons Learned, updated Track Access Permit.	Max Hanna, Ron Benson, Zach Thomas, Martin Cocker, Andres Alarcon
8/1/2014	Corrected fonts and font size. Added definitions for permit holder and track access permit. Added references to the "Red Book." Added audit language in Ch. 8 and new chapter to address adjacent tracks. Adjacent controlled track procedure, Appendix 1-3.	Max Hanna, Ed Buchanan, Ron Benson, Martin Cocker, Darin Francom
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12/20/2022	Update to adjacent track, Lone Worker OTS restrictions, Watchman sightline procedures, and the addition of the RWP Spot Check Program. Various changes for clarity and formatting.	Owen Thompson, David Goodwin, RWP Steering Committee
05/30/2024	Updated definitions and contact information; Color-coded FR and TRAX sections; Added section for updated periodic oversight requirements; Revised contractor training sections; Added RWIC-escorted guests guidelines; Numerous OTS procedures updated; Clarified PPE definitions; Updated radio number assignment explanation; Added RWP Training Assignment Procedure; Minor language changes and updates throughout.	Owen Thompson, David Goodwin, RWP Steering Committee

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1. INTRODUCTION

1.1 BACKGROUND

Utah Transit Authority (UTA) is committed to the safety of its employees, contractors, patrons and pedestrians. This document, the Roadway Worker Protection Program (RWPP), details the on-track safety program applicable to all roadway workers, contractors and invitees involved in the operation of UTA Rail Services, which includes the TRAX light rail transit system, the FrontRunner commuter rail system, the Sugarhouse Streetcar, and the BG&B line.¹

This roadway worker protection procedure is applicable to all UTA Rail Services operations. The purpose of this Program is to aid in the prevention of accidents and injuries that may result from roadway workers and invitees being injured by railroad cars, locomotives, UTA Rail Services vehicles, or roadway maintenance machines. These rules are developed as a minimum safety standard based upon the provisions of 49 CFR 214 (Railroad Workplace Safety) and is adapted to the conditions of UTA Rail Services operation.

The TRAX, FrontRunner, and Streetcar corridors are regulated by the Federal Railroad Administration (FRA) and Roadway workers in this shared use track are subject to FRA rules and regulations. The FRA has granted authority to the Utah Department of Transportation (UDOT), as a Federal Transit Administration (FTA) approved State Safety Oversight (SSO) to enforce FRA regulatory compliance, under FRA's "Railroad Workplace Safety", 49 CFR 214, with FRA's full authority, support, and instruction.

The Mid-Jordan and BG&B lines are regulated by the FRA, and FRA rules and regulations apply to roadway workers. Savage and Utah Railways have adopted the General Code of Operating Rules (GCOR), therefore RWP workers must adhere to GCOR as well. As this program meets or exceeds the standards set forth by GCOR and FRA, UTA roadway workers will abide by this program without regard to the territory.²

Construction on or near the rail may also be subject to UTA's Construction Safety Program. UTA and all invitees will comply with or exceed OSHA regulations.

Positive Train Control (PTC) has been installed on the FrontRunner system. PTC functionality is intended to prevent train over speeds, work zone incursions, train to train collisions and improper movements through switches. PTC functionality includes the ability to positively control working limits, train speeds through usage of

¹ The corridor includes portions of the Bingham, Garfield, Dalton, and Bacchus freight rail lines; referred to as the BG&B line. The BG&B line begins at the Midvale rail yard located at 7300 South and 700 West, just south of TRAX Rail Service Center. Utah Railway and Savage Railway facilitate freight through the Midvale yard and onto the BG&B line. The BG&B extends southwest from the Midvale yard onto the Bingham branch and Dalton Spur a total of 10.2 miles from 700 West Street and State Highway 111, passing through the cities of Midvale, West Jordan and unincorporated of Salt Lake County. In aggregate, the right of way comprises 178.022 acres of which 50.868 acres are held by UTA and 127.153 acres by UPRR. At mile post (MP) 4.80 of the Old Bingham Highway, the Garfield Branch travels northwest 11.06 miles, which includes the 2-mile Bacchus Spur extending northwest through West Jordan, Kearns, and ending in Magna.

² Frontrunner follows GCOR exclusively while TRAX follows a proprietary rulebook. There are some minor differences in procedures and track safety options.

Mandatory Directives and Temporary Speed Restrictions enhancing On-Track Safety protections throughout the system.

1.2 DEFINITIONS

ACS	See 'Automatic Cab Signal'
ACCURATE TIME PIECE	Any time piece that displays hh:mm:ss that is adjustable and is within 30 seconds of the official time displayed in Control/Dispatch.
ADJACENT CONTROLLED TRACK	A controlled track whose track center is spaced 19 feet or less from the track center of the occupied track.
ADJACENT TRACKS	Two or more tracks with track centers spaced less than 25 feet apart, measured center to center.
ATS	See 'Automatic Train Stop'
AUTHORIZATION	Authorization to occupy right of way (ROW) must be obtained from control prior to men and or equipment being allowed to enter.
AUTOMATIC CAB SIGNAL (ACS)	A system that allows cab signals and the cab warning whistle to operate automatically.
AUTOMATIC TRAIN STOP (ATS)	A system activated by wayside inductors positioned to apply the brakes automatically until the train stops.
BLUE LINE JOINT TRACKAGE	Light Rail line from 1300 South to Lovendahl Interlocking
BLUE SIGNAL PROTECTION	Clearly distinguishable blue flag or blue light by day and blue light at night. When attached rolling stock.
BRIDGE WORKER	See 'Railroad Bridge Worker'
CAB SIGNAL	A signal in the operator's compartment or cab that indicates a condition affecting train movement. Cab signals are used with interlocking or block signals or without block signals.
CENTRALIZED TRAFFIC CONTROL (CTC)	A block system that uses block signal indications to authorize train movements.
CONTRACTOR	A person or business entity, an independent contractor, or a sub-contractor, of a person or business entity who is engaged or compensated by UTA to perform any of the duties defined in this Program.
CONTRACTOR WORKER	An individual who is engaged or compensated by UTA or an individual who is engaged or compensated by a contractor who is under contract with UTA to perform any of the duties defined in this Program.

CONTROL CENTER	The communications hub controlling a rail system. Referred to in short as “Control” UTA has two control centers dedicated to rail operations: FrontRunner Control and Light Rail “TRAX” Control.
CONTROL POINT	The location of absolute signals controlled by a controller/dispatcher .
CONTROLLED SIDING	A siding within CTC or interlocking limits where a signal indication authorizes the siding's use.
CONTROLLED SIGNAL	An absolute signal controlled by a controller/dispatcher .
CONTROLLED TRACK	Track upon which the railroad’s operating rules require that all movements of trains and or roadway maintenance machines must be authorized by a train dispatcher or control operator .
CONTROLLER	The person assigned to the control center who issues orders governing the movement of trains on a specific segment of railroad track in accordance with the operating rules that apply to that segment of track. See also “ Dispatcher ”, a synonymous term used by FrontRunner.
CTC	See ‘Centralized Traffic Control’
CURRENT OF TRAFFIC	The movement of trains in one direction on a main track, as specified by the TRAX and FrontRunner Operating rules.
DAILY OPERATING CLEARANCE/BULLETIN	A document issued by Operations to the Rail Service employees daily, that includes all relevant SOPs, Rules, Instructions, General Orders, and other changes that affect aspects of the right of way. It must remain in the possession of each affected employee while on duty.
DERAILMENT	The action of a train or RMM wheel or any part of the wheel leaving the track it is set on for any reason.
DESIGNATED PLACE OF SAFETY	A designated area outside of the foul zone, decided and discussed at safety briefings, where workers and equipment clear to before a train or rail mounted equipment reaches the working limits of the roadway workers.
DIRECT TRAFFIC CONTROL (DTC)	A DTC block or a series of DTC blocks where the train dispatcher authorizes track occupancy.
DISPATCHER	The person assigned to the control center who issues orders governing the movement of trains on a specific segment of railroad track in accordance with the operating rules that apply to that segment of track. See also “ Controller ”, a synonymous term used by TRAX.

DISTANT SIGNAL	A fixed signal outside a block system that governs the approach to a block signal, interlocking signal, or switch point indicator. A distant signal does not indicate conditions that affect track use between the distant signal and block or interlocking signals or between the distant signal and switch point indicator. A distant signal is identified by a "D."
DTC	See 'Direct Traffic Control'
DTC BLOCK	A length of main track specified by name. DTC block name and limits are identified by wayside signs reading, "Begin (name) Block" and "End (name) Block" and by mile post location in the timetable.
EMPLOYER	UTA, or a contractor of UTA, that directly engages or compensates individuals to perform any of the duties defined in this Program.
ENGINEER	See 'Railroad Operator'
EXCLUSIVE TRACK OCCUPANCY	A type of On-Track-Safety in which authority over train and RMM movements on the track within the working limits is held exclusively by the Roadway Worker in Charge. See SECTION 4 ON-TRACK SAFETY PROCEDURES for more information.
FACILITY PLATFORM WORKER	UTA employees who perform functions on the station platform, but do not foul the tracks, or operate equipment within four feet of the rail; across passenger crossings, yard track, and or grade crossings, at which point they will be considered roadway workers.
FLAGMAN OR FLAGGER	A worker designated by the railroad to direct or restrict the movement of trains past a point on a track to provide on-track safety for roadway workers while engaged solely in performing that function.
FOUL OR FOULING A TRACK	The placement of an individual or a piece of equipment in such proximity to a track that the individual or equipment could be struck by a moving train or roadway maintenance machine, or in any case, is within ten (10') feet of the center line of the track. In a signaled grade crossing, the foul zone is reduced to four (4') feet from the field side of the nearest running rail. This 4' foul zone meets the federal minimum and is expressly for the purpose of MOW employees to access gate mechanisms.
FOUL TIME	The time at which fouling a track is authorized by the Controller/Dispatcher .
FRC	See 'FrontRunner Control'
FRONTRUNNER CONTROL (FRC)	The Control Center for FrontRunner

HI-RAIL VEHICLE	A vehicle, which has both rail wheels and rubber tires mounted in such a design that it is capable of traveling on highways or rail, hence hi-rail. Sometimes confused with the manufacturer of grade crossing systems, HiRAIL Corporation. Can be spelled hi-rail, high-rail, or hy-rail.
INACCESSIBLE TRACK	A method of establishing working limits on controlled and non-controlled track by physically preventing entry and movement of trains and equipment.
INDIVIDUAL TRAIN DETECTION (ITD)	A procedure by which a Lone Worker acquires on-track safety by seeing approaching trains and leaving the track before the train arrives and which may be used only under circumstances strictly defined in this Program.
INTER-TRACK BARRIER	A continuous barrier of a permanent or semi-permanent nature that spans the entire work area, is a least 4' in height, and is of sufficient strength to prevent a roadway worker from fouling the adjacent track.
ITD	See 'Individual Train Detection'
JOINT TRACKAGE	Areas of the right of way shared with freight operations
KEY PERFORMANCE INDICATOR (KPI)	A measurable statistic that is tracked to provide information regarding the level of performance of a system or program.
KPI	See 'Key Performance Indicator'
LIGHT RAIL (TRAX) CONTROL (LRC)	The Control Center for TRAX
LONE WORKER	An individual roadway worker who is not being afforded on-track safety by another roadway worker, who is not a member of a roadway work group, and who is not engaged in a common task with another roadway worker.
LRC	See 'Light Rail (TRAX) Control'
MANDATORY DIRECTIVE (MD)	Any movement authority or speed restriction that affects a railroad operation.
MD	See 'Mandatory Directive'
MID JORDAN JOINT TRACKAGE	Light Rail line from 1300 West derail to 5600 West
MINOR CORRECTION OR MINOR REPAIRS	One or more repairs of a minor nature, including, but not limited to, welding, spiking, anchoring, hand tamping, and joint bolt replacement, which are accomplished with hand tools or handheld, hand-supported, or hand-guided power tools. The term does not include machine spiking, machine tamping, or any similarly distracting repair.

NEAR MISS	A near mishap. Any incident that could have resulted in injury or death if the circumstances had been only slightly different. In accordance with this program and UTA policy, all near miss will be reported to UTA supervisor and the Safety Department for evaluation.
NON-CONTROLLED TRACK	Track upon which trains are permitted by railroad rule or by special instruction to move without receiving authorization from a train dispatcher or control operator only under restricted speed.
ON-TRACK SAFETY (OTS)	A state of freedom from the danger of being injured by a moving railroad train or other moving railroad equipment, provided by operating and safety rules that govern track occupancy by personnel, trains, and on-track equipment.
OTS	See ‘On-Track Safety’
OVERSIGHT REPRESENTATIVE	An individual who possesses responsibility to enact mitigations in response to identified hazards at a worksite. Examples include, but are not limited to, the RWIC, Track Access Coordinators, Controllers/Dispatchers , and Safety Personnel.
PERMIT HOLDER	The individual, named on the permit, responsible for the permit. This is typically a responsible individual for the work being conducted.
PERSONAL PROTECTIVE EQUIPMENT (PPE)	Personal Protective Equipment. Roadway workers are required to wear a reflective safety vest at a minimum. See 2.1.4 PERSONAL PROTECTIVE EQUIPMENT .
PILOT	An employee assigned to a train to assist an engineer or conductor who is unfamiliar with the rules or the portion of railroad the train will operate on.
POSITIVE TRAIN CONTROL (PTC)	Positive Train Control systems are technologies designed to automatically stop a train before certain accidents related to human error occur. A safety overlay system designed to monitor train movement and prevent train to train collisions, over speed violations, movement into established work zone limits without permission, and movement over an improperly lined main track switch
PPE	See ‘Personal Protective Equipment’
PPOS	See ‘Predetermined Place of Safety’

<p>PREDETERMINED PLACE OF SAFETY (PPOS)</p>	<p>A specific location that an affected roadway worker must occupy upon receiving a Watchman/Lookout’s warning of approaching movement(s) (“warning”) or a roadway working in charge’s (RWIC’s) notification of pending movement on an adjacent track (“notification”), as designated during the on-track safety job briefing required by 49 CFR 214.315.</p> <p>The PPOS may not be on a track, unless the track has working limits on it and no movements permitted within such working limits by the RWIC. Thus, under these circumstances, the space between the rails of the occupied track may be designated as a place to remain in position or to otherwise occupy upon receiving a warning or notification. The RWIC must determine any change to a PPOS and communicate such change to all affected roadway workers through an updated on-track job briefing.</p>
<p>PTC</p>	<p>See ‘Positive Train Control’</p>
<p>QUALIFIED</p>	<p>A status attained by a worker who has successfully completed any required training for, has demonstrated proficiency in, and has been authorized by UTA to perform the duties of a particular position or function.</p>
<p>RAILROAD</p>	<p>All forms of non-highway ground transportation that run on rails or electromagnetic guide ways, including (1) commuter or other short haul rail passenger service in a metropolitan or suburban area, and (2) high speed ground transportation systems that connect metropolitan areas, without regard to whether they use new technologies not associated with traditional railroads. Such term does not include rapid transit operations within an urban area that are not connected to the general railroad system of transportation.</p>
<p>RAILROAD BRIDGE</p>	<p>A structure supporting one or more railroad tracks above land or water with a span length of 12 feet or more measured along the track centerline. This term applies to the entire structure between the faces of the back walls of abutment or equivalent components, regardless of the number of spans, and includes all such structures, whether of timber, stone, concrete, metal, or any combination thereof.</p>

<p>RAILROAD BRIDGE WORKER / BRIDGE WORKER</p>	<p>Any worker of UTA, or worker of a contractor of, a railroad owning, or responsible for the construction, inspection, testing, or maintenance of a roadway bridge whose assigned duties, if performed on the bridge, include inspection, testing, maintenance, repair, construction, or reconstruction of the track, bridge structural members, operating mechanisms and water traffic control systems, or signal, communication, or train control systems integral to that bridge.</p>
<p>RAILROAD OPERATOR / ENGINEER</p>	<p>A UTA employee qualified to operate the train (Locomotive, Light Rail Vehicle).</p>
<p>RED ZONE</p>	<p>Refers to the area around an RMM where workers are at risk of injury from the RMM or the work it is performing, defined as a distance at least 20 feet from the front, back, and when appropriate, the side, and any extendable part of the RMM.</p>
<p>RESTRICTED SPEED</p>	<p>When required to move at restricted speed, movement must be made at a speed that allows stopping within half the range of vision short of: Train, Engine, Railroad car, Men or equipment fouling the track, Stop signal, or Derail or switch lined improperly. When a train or engine is required to move at restricted speed, the crew must keep a lookout for broken rail and not exceed 20 MPH. Comply with these requirements until the leading wheels reach a point where movement at restricted speed is no longer required.</p>
<p>RIGHT OF WAY (ROW)</p>	<p>Right of Way refers to the region of land upon which track has been built and maintained by UTA. The specific size and boundaries of the Right of Way can vary and depends on the location. UTA may or may not own the property but has the right to operate on the track.</p>
<p>RMM</p>	<p>See 'Roadway Maintenance Machine'</p>

<p>ROADWAY MAINTENANCE MACHINE</p>	<p>A device powered by any means of energy other than hand power that is being used on or near railroad track for maintenance, repair, construction or inspection of track, bridges, roadway, signal, communications, or electric traction systems. RMM manufactured on or after 1 January 1991 but before 28 March 2005 is referred to in the regulation as “existing” and must meet specific retrofit requirements as per 49 CFR 214.</p> <p>Roadway maintenance machines may have road or rail wheels or may be stationary. Further distinguished as On Track, On-Off Track, and Off Track RMM.</p> <ul style="list-style-type: none"> • On Track – equipment that is not provided with highway wheels, such as regulators. • On-Off Track – equipment that may be used on and off the rail, such as hi-rail. • Off Track – equipment that is not provided with rail wheels. Examples include standard highway vehicles, man-portable generators, excavation equipment, and utility vehicles.
<p>ROADWAY WORK GROUP</p>	<p>Two or more roadway workers organized to work together on a common task.</p>
<p>ROADWAY WORKER</p>	<p>Any worker of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities (to include platforms or stations) or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/lookouts as defined in this section. Train crew are not roadway workers.</p>
<p>ROADWAY WORKER IN CHARGE (RWIC)</p>	<p>A UTA designated roadway worker who has demonstrated qualifications to provide on-track safety for groups of roadway workers through the establishment of working limits or the assignment and supervision of watchmen/lookouts or flagmen.</p>
<p>ROW</p>	<p>See ‘Right of Way’</p>
<p>RWIC</p>	<p>See ‘Roadway Worker in Charge’</p>
<p>SAFETY PROGRAM</p>	<p>The UTA RWP Program and supporting documents, programs, SOP, or policy</p>

<p>SECURING DEVICE</p>	<p>A vandal and tamper resistant lock, keyed for application and removal only by the roadway worker for whom the protection is provided. In the absence of a lock, it is acceptable to use a spike driven firmly into a switch tie or a switch point clamp to prevent the use of a manually operated switch. It is also acceptable to use portable derails secured with specifically designed metal wedges. Regardless of the type of securing device, it must be uniquely tagged.</p>
<p>SHARED TRACK</p>	<p>Any track used by UTA trains and equipment which is <i>also</i> used by trains and equipment belonging to any other entity.</p>
<p>SHORT DURATION</p>	<p>As it pertains to the use of ladders or scaffolding on platforms, a job of short duration can be completed between train arrivals on that platform</p>
<p>SIDING</p>	<p>A track connected to the main track and used for meeting or passing trains. Locations of sidings are shown in the FrontRunner timetable. TRAX sidings are controlled by the TRAX Controller.</p>
<p>TAW</p>	<p>See ‘Train Approach Warning’</p>
<p>TEMPORARY SPEED RESTRICTION (TSR)</p>	<p>An imposed reduction of the normal speed for a specific section of track.</p>
<p>TIME WINDOW</p>	<p>A designated period of time for operation.</p>
<p>TRACK ACCESS COORDINATOR</p>	<p>A designated UTA employee who coordinates and authorizes track access by issuing daily work permits on active UTA rail systems.</p>
<p>TRACK ACCESS PERMIT</p>	<p>A document issued by UTA to the permit holder, giving the permit holder permission to enter the ROW or foul the track as necessary. The permit will often describe the exact forms of OTS that must be used.</p>
<p>TRACK AND TIME</p>	<p>A control operator may authorize a worker or work group to exclusively occupy a track or tracks, within specified limits, for a certain time period.</p>
<p>TRACK OCCUPANCY INDICATOR</p>	<p>An indicator that tells whether a length of track is occupied or not.</p>
<p>TRACKSIDE WARNING DETECTOR</p>	<p>A device that indicates conditions such as overheated journals, dragging equipment, excess dimensions, shifted loads, high water, or slides.</p>
<p>TRAIN APPROACH WARNING (TAW)</p>	<p>The means used by a Watchman/Lookout to signify to all recipients of the warning that a train or other on-track equipment is approaching. See 4.7 Train Approach Warning (TAW) by for more information.</p>

<p>TRAIN COORDINATION</p>	<p>A method of establishing working limits on track upon which a train holds exclusive authority to move whereby the crew of that trains yields that authority to a roadway worker.</p>
<p>TRAIN HOST</p>	<p>A UTA FrontRunner employee who is EPREP trained to assist passengers on the train and platform.</p>
<p>TSR</p>	<p>See ‘Temporary Speed Restriction’</p>
<p>UTA</p>	<p>Utah Transit Authority, a public transit district organized under the law of the state of Utah.</p>
<p>WATCHMAN/LOOKOUT</p>	<p>A worker who has been trained and qualified to provide warning to roadway workers of approaching trains or on-track equipment. Watchman/Lookouts shall be properly equipped to provide visual and auditory warnings such as whistles, air horns, white disks, red flags, lanterns, or fuses. A Watchman/Lookout’s sole duty is to look out for approaching trains/on-track equipment and provide enough advanced warning to allow workers to be clear of the foul zone at a minimum of 15 seconds before arrival of trains/on-track equipment.</p>
<p>WORKING LIMITS</p>	<p>A segment of track with definite boundaries established in accordance with this Program upon which trains and engines may move only as authorized by the RWIC having control over that defined segment of track. Working limits may be established through inaccessible track, as defined herein.</p>

1.3 READING THIS MANUAL

This manual applies to all RWP operations carried out within the UTA rail system, including both TRAX, Streetcar, and FrontRunner. Portions of the manual that are applicable only to TRAX/Streetcar or only to FrontRunner will be indicated by text color, as show below.

This text applies only to FrontRunner. It is a dark red in color.

This text applies only to TRAX and Streetcar. It is a dark blue in color.

1.4 CONTACT INFORMATION FOR KEY PERSONNEL

The following persons/organizations have been identified to oversee communications regarding this roadway worker protection Program. Up-to-date information for these contacts can be found in the online copy of the RWP manual, hosted on the Safety Department’s SharePoint page.

1.4.1 LIGHT RAIL (TRAX)/STEETCAR CONTACTS

Contact	Title	Office	Mobile	Email
Light Rail (TRAX) Control (LRC)		801 287-4631		
Light Rail TRAX Operations	Light Rail Operations Manager	801 352-6788	801 831-4383	JBerger@rideuta.com
Light Rail TRAX Track Access Coordinator	Light Rail Operations Supervisor	801 287-3701	385 218-8190	JWoodhead@rideuta.com
Light Rail TRAX Safety	Light Rail Safety Administrator	801 287-2348	801 557-9250	TKing@rideuta.com
Light Rail TRAX Safety	Light Rail Safety Administrator	801 287-3625	801 201-6174	RubGarcia@rideuta.com
Construction Safety	Construction Safety Administrator	801 287-2452	801 381-9541	JSisson@rideuta.com
Roadway Worker Protection Program	Roadway Worker Protection Program Manager	801 287-3424	801 550-3777	OThompson@rideuta.com

Utah Railway	Yard Master	385 250-4023		Chris.brandon@gwrr.com
Utah Railway	General Manager	530 650-5115		jdharrison@gwrr.com

Savage Railway	Yard Master	916 792-4463		patrickmyers@savageservices.com
Savage Railway	General Manager	567 708-1339		Mattcorbin@savageservices.com

Federal Railroad Administration	Railroad Safety Specialist	909 973-6201		Isaac.mckeithen@dot.gov
Utah Department of Transportation	State Safety Oversight		801 910-2191	pjager@uta.gov

1.4.2 FRONTRUNNER CONTACTS

Contact	Title	Office	Mobile	Email
FrontRunner Control (FRC)		801 287-5455		
FrontRunner Operations	Assistant Manager Commuter Rail Operations	801 287-5452	801 502-2180	JCragun@rideuta.com
FrontRunner Track Access Coordinator	Commuter Rail System Supervisor		385 433-0650	ACorona@rideuta.com
FrontRunner Rail Safety	Commuter Rail Safety Administrator	801 287-4822	801 232-1099	TShingleto@rideuta.com
Construction Safety	Construction Safety Administrator	801 287-2452	801 381-9541	JSisson@rideuta.com
Roadway Worker Protection Program	Roadway Worker Protection Program Manager	801 287-3424	801 550-3777	OThompson@rideuta.com

Federal Railroad Administration	Railroad Safety Specialist	909 973-6201		Isaac.mckeithen@dot.gov
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1.4.3 UTA MAINTENANCE OF WAY CONTACTS

Contact	Title	Office	Mobile	Email
MOW Systems	Director of Maintenance Support	801 287-3026	801 310-8361	KAnderson@rideuta.com
MOW Systems	Manager Rail Systems Assets	801 352-6642	801 330-1600	PBrindle@rideuta.com
MOW Infrastructure	Manager of Right of Way Assets	801 287-5438	801 330-5241	DFilby@rideuta.com
MOW Infrastructure	Assistant Manager Rail Infrastructure Assets	801 287-3468	801 807-9601	BKeck@rideuta.com
Facilities	Facilities Maintenance Manager	801 287-3052	801 448-2696	GMiner@rideuta.com

1.4.4 UNION PACIFIC RAILROAD EMERGENCY CONTACT INFORMATION

For derailments, crossing accidents, collision, reports of suspicious activity or any other emergency, call **UP Risk Management (UPRR Police)** at **888 877-7267**.

Contact	Title	Phone
Union Pacific Railroad	Manager – Line & Signal	510 504-7492
	EMERGENCY LINE	402 636-1922
Harriman Dispatch Center (Omaha, Nebraska) For train dispatching issues	DISPATCHER 5 Provo to SLC. Any issues on the south end	402-636-4667
	Dispatcher 6 SLC to Ogden. Any issues on the North end	800-726-1055
	Ogden-Provo Corridor Manager/Director	402-636-7423
	Passenger Operations Corridor Manager	402-636-7057
Passenger Operations Liaison	General Manager Passenger Train Operations	225 955-4064
Local UP Operations Utah Service Unit Salt Lake City	Roper Yard Master	801 212-5282
	Ogden Yard Master	801 626-8204

1.5 PROGRAM IMPLEMENTATION BY UTA

The safety of roadway workers is a top priority to UTA. UTA employees, roadway workers, and freight operators must all communicate and coordinate movements along the alignment to provide for the safety of the roadway workers. Accordingly, all roadway workers must follow the procedure outlined in this section.

Light Rail Control for TRAX, Streetcar, BG&B, and FrontRunner Control are Central Control for their respective active rail corridors. All operational and standard maintenance activity communications are done through the Light Rail (TRAX) Control and FrontRunner Control Rooms. The coordination of UTA roadway workers, contractors, and/or roadway maintenance machines operators on UTA’s active rail corridors should be reviewed by the Light Rail **Controllers** and FrontRunner **Dispatchers**.

UTA has Track Access Coordinators for TRAX/Streetcar and FrontRunner. The Track Access Coordinators are responsible for reviewing construction and maintenance projects that impact the active rail corridors. The Track Access Coordinator will issue Track Access Permits for qualifying work. When Track Access Permits are issued, the permits are provided to Light Rail (TRAX) Control and FrontRunner Dispatch for activation when the work party who has been issued the Track Access Permit calls in and activates the permit. When Track Access Permits

are activated and control of track segments relinquished to the RWIC, trains and other personnel should be notified by radio broadcast and/or by Daily Clearance/Bulletin.

Standard maintenance work activities, time frame of the work, equipment needed to complete the work, and type of on track safety should be discussed with the [Controller/Dispatcher](#). This can be done in person, by telephone, or by radio.

1.5.1 NEAR MISSES AND FEEDBACK

A near miss will be reported through the supervisory chain to the Safety Department for analysis and review. Review of near misses will be conducted by the Safety Administrator responsible for that corridor or his designee. The Lessons Learned from that review will be posted for UTA employees to review.

UTA employees and contractors who operate under this program are welcome to give feedback directly to the UTA Safety Department.

1.5.2 PROGRAM APPROVAL PROCESS

The UTA Safety Department reviews this program upon the receipt of feedback, or if there is no feedback from the field, then annually. Proposed changes are circulated within the Safety Department, Maintenance of Way, Light Rail Operations, FrontRunner Operations, and other select individuals. Upon consensus from the above, the proposed Program manual is distributed to the 214 Track Specialist at Federal Railroad Administration via email. FRA has 60 days to return comments. UTA will publish the program via email, SharePoint, and to external contractors via the UTA website.

1.5.3 RWP INCIDENT REPORTING

RWP Incident reporting will be tracked by the RWP Program Manager and entered into the RWP Incident Log and tracked on the Monthly Safety Dashboard. All RWP Incidents should be reported to the RWP Program Manager. Information can be gathered from TRAX and FrontRunner Incident log entries, site visits by any RWIC trained personnel, Track Access Coordinator, Safety Administrator, and RWP Program Manager. Any reported Good Faith Challenges can also be used to document any RWP Incidents.

1.5.4 CHANGES IN SCHEDULED WORK ACTIVITIES

Request for change to the approved schedule must be made at least 24 hours in advance to the Track Access Coordinator who issued the permit. In the event of an emergency situation, the [Controller/Dispatcher](#) can approve a change. If approval is granted, the [Controller/Dispatcher](#) will notify operators of the location and activity by radio or train bulletin. The group asking permission for track access must communicate this change in work activities to their personnel and all affected subcontractors in the form of a job briefing. All involved will maintain documentation that these changes have been communicated to their workers and subcontractors. The Track Access Coordinator will also keep a record of these changes.

1.5.5 FREIGHT LINE REQUESTS

Requests from the freight operator to access the rail outside of its operating window shall be made at least 24 hours in advance to the UTA Rail Services coordinator. Prior to granting permission, UTA Rail Services coordinator will evaluate the request and notify the freight operator of its decision. If access is granted, all

affected roadway workers shall be notified of the access before the freight operator may begin train movement. The coordinator will notify UTA Rail Services operators via the train bulletin.

Requests for FrontRunner access will be conveyed through UTA radios on channel FR1. The Freight window for Blue Line Joint Trackage is from 12:00 am to 5:00 am Monday through Friday. For Mid Jordan Joint Trackage, the Freight window is 11:45 pm to 4:45 am. Access may be delayed due to track maintenance.

All communications shall be directed to specified individuals. This may be done by radio, telephone, or in person.

Leaving a voice mail message or sending a fax of a proposed change in schedule does not constitute authorization to begin train movement.

All movements of Utah Railway shall be at restricted speeds within working limits.

1.6 TRAX / FRONTRUNNER COMMUNICATIONS WITH FRA AND UDOT REGULATORY AGENCIES

Communications between UTA, Federal Railroad Administration (FRA), and UDOT state safety oversight agency, or other regulatory agency.

1.6.1 FRA/UDOT TRACK INSPECTION REPORT

All FRA/UDOT track inspections of UTA Rail Service will be reported to the Director of Maintenance Support or the rail safety administrators, listed in section [1.4 Contact Information for Key Personnel](#).

1.6.2 SIGNING OF FRA/UDOT TRACK INSPECTION REPORTS

All inspection reports resulting from an FRA/UDOT track inspection will be signed and received by the UTA Director of Maintenance Support.

1.6.3 UTAH TRANSIT AUTHORITY INSPECTION OF TRACKS

UTA shall have the responsibility to make periodic inspections of the UTA tracks. The UPRR shall have the responsibility to make periodic inspections of the joint use track on the FrontRunner commuter rail from Ogden to Pleasant View.

2. TRAINING

2.1 UTA RESPONSIBILITIES

UTA will furnish to all UTA Rail Services roadway workers initial and annual on-track safety training. Training is required for all individuals who fall under the designation of a roadway worker or who may be assigned rail maintenance duties on or near the railroad corridor such that they have the potential of fouling a track. The required training will review the duties and responsibilities of each worker, as well as the requirements of this Program. Each roadway worker responsible for the on-track safety of others, and each Lone Worker, shall maintain a copy of this program document on the job site. Digital copies meet this requirement but require the device be appropriately powered and accessible. Due to the restrictions on cell phone use in the ROW, a hard or paper copy is preferred and safer.

Each roadway worker, upon completion of training, must demonstrate a basic knowledge of rules and procedures related to on-track safety through written or verbal testing as may be determined by the safety administrator. UTA shall not assign an employee or contractor to perform duties of a roadway worker and no employee shall accept such assignments unless trained and has demonstrated proficiency.

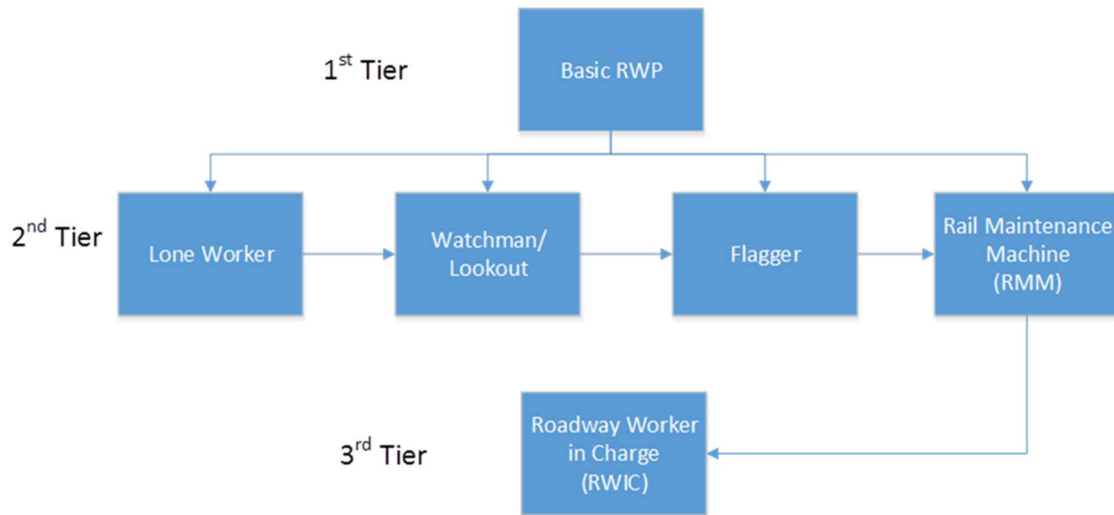
In addition to the basic training and testing of roadway workers, those individuals who will perform duties as Watchmen/Lookout, Flagger, Lone Worker, Rail Maintenance Machine operator, and RWIC will separately qualify prior to performing such duties. RWIC certifications may include TRAX Exclusive Track Occupancy procedures, FrontRunner Exclusive Track Occupancy procedures, or both, as required by the occupational duties of the roadway worker.

A roadway worker performing duties of Watchmen/Lookout, Flagger, Lone Worker, Rail Maintenance Machine operator, and RWIC will demonstrate their qualifications by passing an annual written exam and a prescribed set of OJT activities for each level of qualification in which the employee demonstrates proficiency. The content of the testing materials for such positions shall reflect the procedures and skills outlined in this manual.

Each worker will receive a wallet card indicating his level of training or qualification, which must be kept on their person at all times when working within the UTA Right of Way. Each roadway worker's card will be punched or stamped to indicate which modules have been completed (classroom training and OJT sheets for all modules above Basic). UTA considers these measures to meet the FRA requirement for periodic training and qualification.

UTA provides three tiers of training and qualification:

ROADWAY WORKER TRAINING



To effectively monitor the program, Roadway Worker Protection Program Manager or designee will conduct the roadway worker protection training. They will also maintain written or electronic records of each worker who is trained and to what level of training they have qualified to perform. Each record will include the name of the worker, the type of qualification made, and the most recent date of qualification. The records shall be available for inspection and/or photocopying by UTA, UDOT, and FRA during regular business hours.

2.1.1 ASSIGNMENT OF TRAINING

RWP training assignments are made to employees at the direction of the manager or executive responsible for their oversight. When making new assignments or updating existing ones, UTA managers and/or executives will provide the RWP Program Manager a list of those within the leader’s area of responsibility whose expected duties will require RWP certification, either providing the names and badge numbers of those they wish to be assigned training, or providing defined criteria such as, but not limited to, job title, service unit, or cost center. This assignment criteria may be updated at the manager’s discretion. Assignments must comply with all relevant regulations governing the assignment of RWP and safety-sensitive training.

An annual snapshot of assignment criteria can be found in [APPENDIX A: CURRENT RWP ASSIGNMENTS](#). Training assignments will be reviewed annually and updated as needed.

2.1.2 CONTRACTORS AND OTHER INVITEES AS ROADWAY WORKERS

Contractors and individuals designated as roadway workers, or who may be assigned duties on or near track with the potential of fouling a track, will receive appropriate training before undertaking such responsibilities. They are expected to maintain qualifications and safety standards consistent with those of UTA roadway workers, as outlined in this Program. Contractors must furnish documentation of their workers' qualifications prior to commencing any work that may result in the fouling of a track.

As such, it is mandatory for contractors to ensure that all their roadway workers receive RWP training. This is a requirement for a work permit. Moreover, UTA reserves the right to request copies of the permit holder's RWP card from the contractor.

With specific and documented exceptions, UTA prohibits contractors from serving as RWICs, Lone Workers, Watchmen/Lookouts, Flaggers, or RMM Operators. However, UTA retains the authority to qualify certain non-UTA individuals for higher tiers of RWP roles.

Every roadway worker, contractor, or visitor must ensure on-track safety active and in place before fouling a track or engaging in work that has the potential to foul the track. A track is fouled when personnel, tools, or equipment are within ten feet of the centerline of the tracks.

UTA will either provide basic roadway worker training for contractors and visitors, or the RWP Project Manager may review and approve external training as being an acceptable equivalent on a case-by-case basis. The charge for UTA training may vary depending upon the circumstances.

2.1.3 ESCORTED GUESTS

In select cases, individuals without RWP qualifications may access working limits, or limited sections of the Right of Way, provided they are actively escorted by an RWIC certified UTA roadway worker for the duration of their visit. Escorted individuals may not perform any work beyond observations, reading meters, and blue stake activities, etc. Escorted guests are still required to observe the requirements of OTS and must attend all safety briefings. The RWIC of the working limits is responsible for ensuring that guests are accompanied at all times and provide any direction or intervention necessary to ensure safety requirements are followed. The RWIC or Control/Dispatch is responsible for approving individuals as eligible for admission to the working limits or limited sections of the Right of Way under the conditions of this section.

2.1.4 PERSONAL PROTECTIVE EQUIPMENT

UTA and Contractors are required by OSHA to provide basic PPE for employees. However, it is the employee's responsibility to wear and care for the PPE. Basic PPE will consist of:

- 1) Radio³ communication with the control center (applies to UTA employees and contractor RWICs only)
- 2) ANSI Class 2 High Visibility safety vest or coat with reflective striping which must be worn at all times⁴
- 3) Sturdy boots that support the ankle and that provides appropriate protection for the work to be performed
- 4) Safety glasses, when appropriate
- 5) Gloves, when appropriate
- 6) Hard hat, when appropriate

³ Cellular devices may be used as backup devices for communication purposes as needed but are not required and may not serve as the primary means of communication.

⁴ UTA makes available safety vests for UTA employees with a reflective "X" marking on the back. This allows the operator to determine if the worker is facing the train and to respond appropriately. Although this type of vest is utilized by rail service and Maintenance of Way, other vests with different reflective markings may be used.

Additional PPE may also include hearing protection, face shield, goggles, or respiratory protection as the requirements of the job dictate. See your supervisor or manager for specific PPE requirements for your job.

All roadway workers on construction projects must wear hard hats in accordance with the UTA Construction Safety and Security Program.

2.2 BASIC ROADWAY WORKER

Upon completion of the training, a roadway worker, at a minimum, can perform and demonstrate proficiency via written test, the following:

- 1) Recognize railroad tracks and understand when on-track safety is required
- 2) Know the functions and responsibilities of persons involved with on-track safety procedures (i.e. Watchman/Lookout, Flagger, RWIC)
- 3) Understand responsibility of complying with on-track safety instructions
- 4) Know signals given by watchmen/lookouts and the proper procedures upon receiving a train approach warning
- 5) Know the hazards associated with working on or near railroad tracks, including review of on-track safety rules and procedures
- 6) Understand proper safety practices when working near RMMs
- 7) Know how to avoid pinch points and areas of poor visibility
- 8) Notify the RWIC if there is an unsafe condition
- 9) Personally document the safety brief
- 10) Wear proper PPE and reinforce the PPE requirements among fellow roadway workers
- 11) Determine if it is safe to enter the foul zone or cross the tracks
- 12) When possible, acknowledge the train by making eye contact with the operator and a wave of the hand⁵

2.3 WATCHMAN/LOOKOUT

Each Watchman/Lookout shall be trained, qualified, designated, and equipped to provide appropriate train approach warning. Upon completion of the annual training, a Watchman/Lookout, at a minimum, must be able to demonstrate proficiency by passing a written test.

Watchman/Lookouts are required to do the following:

- 1) Not perform any other duties while in this capacity.
- 2) Detect and recognize approaching trains and warn roadway worker personnel of approaching rail vehicles by visual and audible methods (see 4.7 Train Approach Warning (TAW) by Watchman/Lookout). This is the primary and sole duty of the Watchman/Lookout.
- 3) Participate in all Roadway worker On-track safety job briefings prior to performing their duties as Watchman/Lookouts.

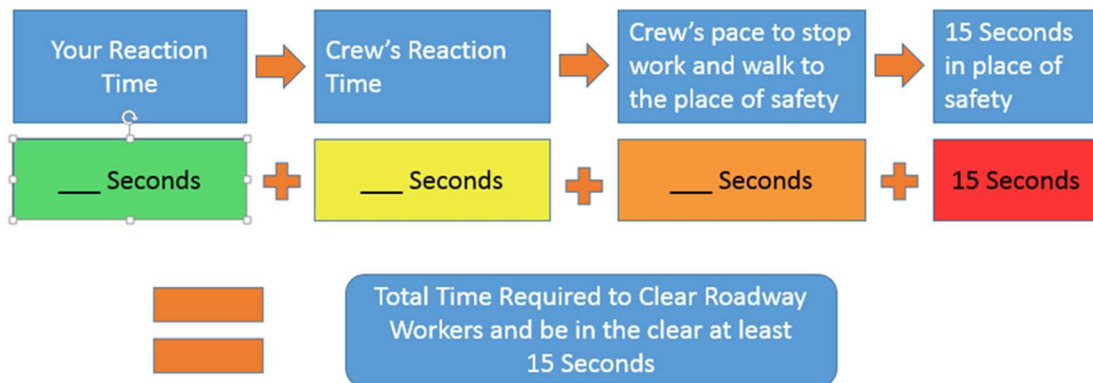
⁵ The purpose of the eye contact and hand wave is to acknowledge the train, reassuring the operator that you see the train and will not attempt to enter the foul zone while the train is within the working limits of the job. Each roadway worker will make a good faith attempt to meet this request. At no point will one person be designated to fulfill this requirement, as delegation of this action defeats the purpose.

- 4) Determine the sight distance along the track at which trains must be visible in order to provide the prescribed warning time.
- 5) Know the rules and procedures of railroad to be used for train approach warning.
- 6) Have the ability to communicate with the RWIC and/or Control as necessary.
- 7) Give the “all clear” once the train exits the work zone and it is safe to resume work, not more than 15 seconds after a train has passed through the working limits.
- 8) Provide warning to all employees by means which neither requires workers to look directly at the Watchman/Lookout (horn, whistle, voice and/or physical tap) nor creates another safety hazard.
- 9) Provide physical warnings to workers who cannot hear or see other warnings. These warnings shall be distinct, clear and not cause harm to workers - further guidance is given in section 4.7 Train Approach Warning (TAW) by Watchman/Lookout.

2.3.1 DETERMINING PROPER SIGHT DISTANCES

Watchman/Lookouts must be able to properly determine sight distances to allow all Roadway Workers enough time to be clear of the foul zone a minimum of 15 seconds before the arrival of a train or on track equipment. Watchman/Lookouts must know the Maximum Authorized Speed for the track that is being fouled, to determine the minimum sight distances required to properly clear Roadway Workers.

The chart below outlines the process that should be followed to determine the number of seconds it will take for the work group to clear the foul zone and move to the predetermined place of safety, including the mandatory 15 seconds to be spent at the place of safety before the train or RMM enters the working limits.



Once the estimated time to clear has been calculated, the table on the right should be used to determine the minimum sightline distance in feet.

To use the table, find the row with the maximum authorized speed for the working limit’s location, and multiply the number of seconds needed to clear by the value in the second column for that row. The resulting number represents the distance in feet necessary for an adequate sightline. If the watchman does not have a clear view of the track at that distance, then Watchman/Lookout cannot be used as the primary form of On-Track Safety.

Maximum Authorized Speed	Feet per Second
5	7'
10	15'
15	22'
20	29'
25	37'
30	44'
35	51'
40	59'
45	66'
50	73'
55	81'
60	88'
65	95'
70	103'
75	110'
79	116'

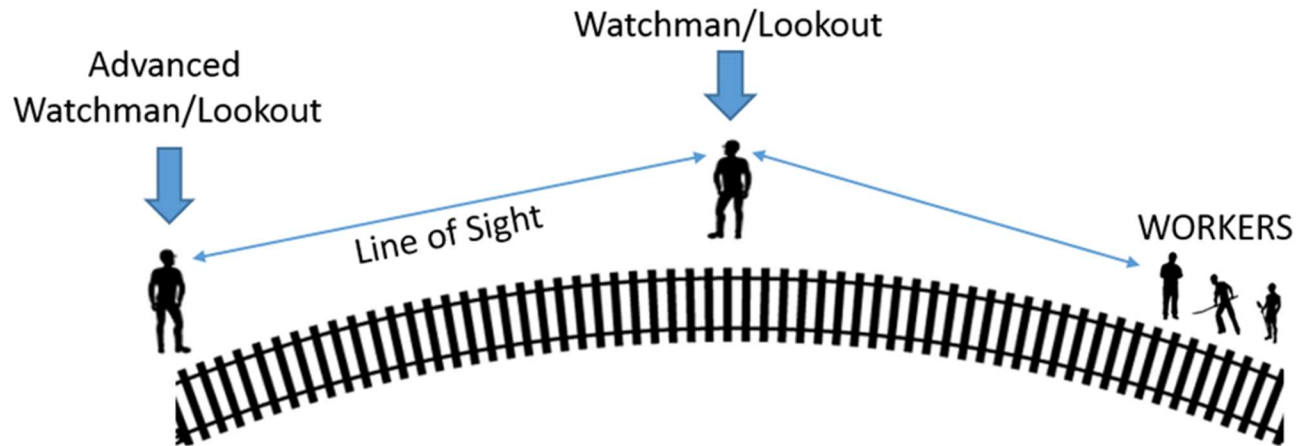
Example:

If a workgroup will need 35 seconds to clear (including the 15 seconds at the place of safety) and the maximum authorized speed for the current location is 50 MPH, then one would multiply 35 by 73', resulting in a total of 2,590 feet, the minimum sightline needed for Watchman/Lookout in that location.

2.3.2 ADVANCED WATCHMAN/LOOKOUT

The usage of additional Watchman/Lookouts may be necessary in certain scenarios, i.e. on a curve where there are insufficient sight lines to achieve the minimum 15 seconds of clearance time. If an advanced Watchman/Lookout is used, the following requirements must be met:

- 1) Watchman/Lookouts must be able to see each other and be in a position give and receive the necessary Train Approach Warning.
- 2) Train Approach Warning must be given by the use of a whistle or air horn and include a visual warning. If an air horn is used, Watchman/Lookouts must have a hand pump on their person or a spare replacement air canister.
- 3) Watchman/Lookouts must monitor and be on the same dedicated radio channel, in the event it becomes necessary to verbally communicate with each other.



2.4 FLAGMAN OR FLAGGER

Upon completion of the annual training, a Flagger, at a minimum, can perform and demonstrate proficiency via written test, the following, in addition to the basic roadway worker responsibilities:

- 1) Know the content and application of the operating rules of the railroad pertaining to giving proper stop signals to trains and holding trains clear of working limits.
- 2) Be in possession of the appropriate flagging materials for the environment, either flags or light, an accurate time piece, and a UTA issued radio.
- 3) Understand the work limits and the surrounding area, and the work being performed.
- 4) Have ability to communicate with the RWIC and/or Control as necessary.
- 5) Understand the difference between railroad flagging duties and UDOT flagging duties.
- 6) Perform no other duty.
- 7) Remain in their position until relieved by the RWIC.
- 8) Take direction from the RWIC only; no other person, including control is authorized to direct the flagger to allow movement of trains or rail equipment.
- 9) The Flagger shall remain in a place of safety at all times and shall be located at the oncoming side of normal traffic flow with a minimum 500 feet from the actual work zone on TRAX or 1 mile on FrontRunner. These minimum distances should be increased by a factor of 2x or more as needed to account for adverse conditions, such as inclement weather, frost, snow, grade of incline, debris, etc.
- 10) The Flagger should immediately notify the RWIC if the Flagger can no longer give 100% of their attention to their duties for any reason.
- 11) RWIC's should treat a non-response from the Flagger as an indication to clear the track immediately.
- 12) Have their required PPE and safety equipment, flags and/or flashlight and UTA issued radio BEFORE entering the right of way.
- 13) Use and monitor their UTA issued radio, set on the proper channel, at all times, while performing flagging duties.
- 14) If working at night or in low-light conditions, the flagger shall have a working flashlight.
- 15) Participate in all Roadway Worker On-track safety job briefings.
- 16) Permitted to use their cell phones to contact the RWIC when radio communications are disrupted - at no other time shall the Flagger use their cell phone.
- 17) Face oncoming traffic to be flagged.

- 18) If stopping trains or equipment Flaggers shall swing a red flag or flashlight (if at night) horizontally to the track until the train or rail equipment comes to a complete stop.
- 19) Signal a stop to all trains or rail equipment from a place of safety and a minimum of 500 feet from the work zone on TRAX or 1 mile on Front Runner on the oncoming traffic side of the work zone, if the RWIC does not give permission to allow the proceed signal.
- 20) Hold all trains or rail equipment until the RWIC gives permission for the proceed signal.
- 21) Immediately report a flagging run through to the RWIC.

2.5 LONE WORKER

Upon completion of the annual training, a Lone Worker, at a minimum, can perform and demonstrate proficiency via written test, the following, in addition to the basic roadway worker responsibilities:

- 1) Detect approaching trains and move to a place of safety upon their approach.
- 2) Determine the distance along the track at which trains must be visible in order to provide the prescribed warning time.
- 3) Know the rules and procedures for individual train detection, including establishment of working limits.
- 4) Know the on-track safety procedures to be used in the area in which the worker is to be qualified and permitted to work alone.
- 5) Have a knowledge of train schedules in the area of work.
- 6) Know how and when to use individual train detection (ITD) or any other form of protection, such as train coordination (See [4.6.1 No Go Areas for Individual Train Detection](#)).
- 7) Lone Workers may not engage in activities that interfere with ITD.
- 8) Be in possession of a UTA issued radio and an accurate timepiece.
- 9) Remain in a place of safety until Roadway Worker protection can be established.
- 10) All Lone Workers shall maintain a vigilant lookout while using Individual Train Detection (ITD) and are prohibited from performing duties that obstruct their ability to maintain a vigilant lookout while ITD is being used.
- 11) Wear their required PPE before entering the Roadway.
- 12) Conduct an on-track safety job briefing with the appropriate Control Center. In the event a [controller/dispatcher](#) is unavailable the briefing must be conducted with a supervisor.
- 13) Lone Workers using ITD must fill out the statement of on-track safety prior to fouling any UTA track. The statement of on-track safety must be in possession of the Lone Worker while fouling the track.
- 14) Contact Control and receive authorization to enter the right of way and foul the track.
- 15) In the event the minimum clearance time of 15 seconds cannot be achieved, ITD cannot be used as a means of on-track safety.
- 16) Perform only routine inspections and surveys, and only be in areas where the Lone Worker can detect approaching trains and other On-Track equipment.
- 17) Not enter areas where they are impaired in detecting trains. Impairment can be caused by background noise, lights, precipitation, fog, passing trains, or any other physical conditions.
- 18) Use more restrictive forms On-Track safety any time they enter areas of no clearance, interlockings, and curves.
- 19) Contact control when they have cleared the track and are no longer in the foul zone.

Lone Workers are not expected to carry a hard copy of this manual while in the foul zone. A copy shall be kept in the vehicle and the Lone Worker will have access to the program manual via radio communications with a Supervisor or other employee.

2.6 ROADWAY MAINTENANCE MACHINES

Upon completion of the annual training, an operator, at a minimum, can perform and demonstrate proficiency via written test, the following, in addition to the basic roadway worker responsibilities:

- 1) Be familiar with methods to determine safe operating procedures for each machine that the operator is expected to operate per the operator's manual and operators are expected to follow all safety procedures listed in such manual.
- 2) Procedures to prevent any part of the machine from being struck by a train or other equipment on another track.
- 3) Safety briefings at worksites involving RMM should cover the following additional items:
 - a. Possible and potential foul points
 - b. Extendable features of RMM
 - c. Expectations of safe operations
 - d. Planned movements
 - e. Adjacent track equipment or movements
 - f. Lowering devices before movement
 - g. On ground communications and notifications of possible fouling
- 4) Procedures to provide for stopping the machine short of other machines or obstructions on the track.
- 5) Be able to identify On-Track, On-Off Track, and Off-Track RMM.
- 6) Be familiar with rules of the road, to include, but not exclusively:
 - a. Maximum allowable travel speed for the conditions.
 - b. Status of signals.
 - c. When an employee is able to exit equipment.
 - d. When the operator must stay in equipment.
 - e. A RMM operator must maintain at least 200 feet apart from other equipment while traveling.
 - f. A RMM operator can bunch equipment to 50 feet when necessary to cross a grade crossing and while conducting work within the working limits.
 - g. Grade crossing procedures.
 - h. If RMM operator loses sight of work crew within the red zone (20' from RMM and extendable features), all movements will stop.
 - i. Only workers who are assisting with the execution of RMM work shall approach nearer than 20' while the RMM is moving or performing work.
 - j. All RMM operating instructions and manuals will be located within the operating cab (large enough to carry) of each individual RMM.
- 7) Verify a coupler or tow bar, as appropriate, is in use when towing or pushing other maintenance machines
 - a. Be familiar with maintenance of the machine.
 - b. Communicate with control via radio as appropriate.
 - c. Conduct an equipment inspection prior to using a RMM at the beginning of the shift or before use.

- d. Understand and enforce that roadway workers must maintain a distance at least 20 feet from the front, back, side, and any extendable part of the RMM. This area can be collectively referred to as the Red Zone around the RMM.
- e. Familiarity with Positive Train Control and how it impacts the work area, if applicable.
- 8) If the RMM has a crane, then UTA or employer will verify:
 - a. Each operator of an RMM with a crane must be certified per the OSHA 1926 CC standard.
 - b. Each RMM equipped with a crane must be certified for RMM operations.
 - c. Maintain records of such training, qualification, and testing as appropriate.
- 9) Requirements of working around an RMM
 - a. Procedures for communication with operator.
 - b. Work zone expectations, situational awareness.
 - c. Appropriate completion of the safety briefing as it relates to RMM requirements.

Initial and periodic qualification of a roadway worker to operate a roadway maintenance machine shall be evidenced by demonstrated proficiency. No employee shall operate or work around a RMM until trained and qualified annually on the specific machine and work expectations.

2.7 ROADWAY-WORKER-IN-CHARGE

The RWIC has the primary duty of rule compliance, oversight, and on-track safety of all personnel within their working limits. Upon completion of the annual training, an RWIC, at a minimum, can perform and demonstrate proficiency via written test, the following in addition to the basic roadway worker, Lone Worker, Flagger, Watchman/Lookout, and RMM responsibilities:

- 1) Enforce proper PPE among work group
- 2) Communicate with Control as appropriate
- 3) Facilitate and document job briefs
- 4) Establish working limits for the work group when deemed appropriate
- 5) Remove individuals from the right-of-way who are unsafe or otherwise not authorized
- 6) Conduct follow-up job briefs when:
 - a. Working conditions change
 - b. Members of group change
- 7) Be in possession of the most current rule book and RWPP, as appropriate - the manual must be readily available either in hard or electronic copy on all job sites. Due to the restrictions on electronic devices on the jobsite, hard copy is preferred.
- 8) Be in possession of a UTA issued radio, and continuously monitor radio traffic for area in which work is being performed
- 9) Know what on-track training and qualifications are required of the roadway workers to be supervised or protected:
 - a. Verify all members of the crew are appropriately certified for the work being performed
 - b. Prevent non-RWP certified personnel from accessing the site
- 10) Be familiar with the contents and application of the operating rules of the railroad pertaining to the establishment of working limits
- 11) Know the contents and application of the rules of the railroad pertaining to the establishment of train approach warning

- 12) Be familiar with the relevant physical characteristics of the area of the railroad upon which the roadway worker is qualified
- 13) Be on-site to conduct an on-track job brief (except for Lone Worker) and remain available to fulfill other responsibilities listed herein
- 14) The RWIC may perform the duties of a Watchman/Lookout when there are only two workers in the work crew. If there are more than two workers in the crew the RWIC is encouraged to designate another qualified employee as the Watchman/Lookout.
- 15) The RWIC is the only authority to determine who is permitted to communicate with the rail or track equipment operator(s) within the working limits by radio or authorized hand signals.
- 16) The RWIC has a distinct responsibility to resolve good-faith challenges in accordance with the procedures set forth in this manual. This responsibility cannot be delegated.
- 17) Familiarity with Positive Train Control and how it impacts the work area, if applicable.

2.7.1 TRAINING FOR RWIC ACCIDENT RESPONSE

In the event of an accident or incident that takes place near active working limits, the RWIC will be trained to respond as follows.

- 1) If an RWIC is already nearby or onsite:
 - a. The RWIC should take charge of the situation until relieved by incident command personnel.
 - b. After being relieved the RWIC should be part of the incident command structure as a “Branch Director” and represent UTA.
 - c. The RWIC should provide the incident commander on-track safety information if the track is to remain active during the incident.
 - d. The RWIC should be relieved as the “Branch Director” by another qualified RWIC (i.e. Operation Field Supervisor relieving MOW RWIC).
- 2) If no RWIC is available at the scene of an incident, an RWIC should be dispatched to act as “Branch Director” to oversee UTA’s On-Track Safety.
 - a. The RWIC should make contact with the Incident Command upon arrival.
 - b. The RWIC should provide the incident commander on-track safety information if the track is to remain active during the incident.
 - c. When the incident scene is cleared, the RWIC will inform Control that the track is clear and ready to return to service.

3. COMMUNICATIONS

3.1 JOB BRIEFING WHEN FOULING A TRACK

UTA, its contractors and employees, and any other invitee permitted access to the railroad corridor shall be responsible for conducting a job briefing before engaging in any project where track will be fouled or potentially fouled. The job briefing shall be conducted by the RWIC who may foul the track. A job briefing is considered completed when each individual has acknowledged an understanding of the on-track safety procedures and instructions presented. Each roadway worker in attendance at the job briefing meeting will acknowledge to their RWIC that they understand the briefing.

3.2 JOB BRIEFING INFORMATION

All information related to on-track safety shall be given in the job briefing to all workers who will or may foul the track during their work assignment. The appropriate RWIC will be responsible for determining and communicating the content of the job briefing meeting. Roadway workers are not allowed to perform work without an RWIC present. If an RWIC leaves or is not available all work must cease, and all Roadway Workers must clear from the right of way. In addition to other safety issues that may be specific to their assignment, the job briefing will include:

- 1) Date of work and number of employees in the crew
- 2) Nature of the work to be performed and the possibility of limited sight distances or other location characteristics.
- 3) Designation of the RWIC. This may be the assigned crew foreman if she is qualified as provided in this Program
- 4) The method by which the RWIC will ensure that on-track safety provided
- 5) The track limits and time limits of track authority granted by the UTA Rail Services [controller/dispatcher](#)
- 6) Track that is permitted to be fouled
- 7) The on-track designated place of safety where workers are clear from trains
- 8) Safety that will be provided on adjacent tracks, if required or deemed necessary by the RWIC and identification of any roadway maintenance machines that will foul such tracks
- 9) The designated work limits around track machinery
- 10) Safe working/traveling distance between machines as per Chapter 8 of this program
- 11) The means of warning when on-track safety is provided by a Watchman/Lookout
- 12) Review of the required PPE for the specific job to be performed
- 13) Status of the overhead catenary system electrical cables and the need for approved work permits, grounding or red tag procedures if the work will be performed within ten feet of the OCS
- 14) Any additional safety issues that pertain to the use of RMM, as appropriate

The above is typically recorded in an employee's "Red Book" but may be addressed on a contractor provided form that covers the same information, or any piece of paper.

3.3 FOLLOW-UP JOB BRIEFING

If conditions change such that the material previously covered in the job briefing no longer applies, the RWIC must conduct a follow-up briefing. Conditions that require a follow-up briefing include, but are not limited to the following:

- 1) Changes in working conditions or procedures.
- 2) Additional roadway workers enter or leave the working limits of a working group.
- 3) The procedures employed to ensure on-track safety are about to be modified, extended, or terminated.
- 4) Adjustments are required by a UTA Rail Services operating order change.

3.4 JOB BRIEFING FOR A LONE WORKER

Each Lone Worker shall participate in a job briefing with a [Controller/Dispatcher](#) relevant to the system within which the work is to take place and an RWIC or Supervisor at the beginning of each shift or prior to fouling any track. This briefing will include the planned work assignments, itinerary, form of on-track safety, and procedures that will be followed to ensure on-track safety. Each Lone Worker shall be afforded the same protection as worker groups. Each Lone Worker shall maintain a means of communication using a radio. If communications cannot be established with Control, a Lone Worker shall not proceed with any work or foul the track. Individual train detection or inaccessible track may be used by the Lone Worker. Lone Workers must call Control to get authorization to enter the ROW. Lone Workers will then follow the [Controller/Dispatcher](#)'s instructions.

3.5 FREQUENCY OF BRIEFINGS

The RWIC of any working group (or Lone Worker and [Controller/Dispatcher](#) or Supervisor) shall conduct job briefings at the beginning of each work shift, if the working conditions change, additional workers enter the working limits, or adjustments to the On Track Safety (OTS) is made.⁶

3.6 BRIEFING FORMS

All UTA employees must complete a form acknowledging the Job Briefing. The preferred form is the UTA On Track Safety book "Red Book". Similar job-specific briefs or a contractor-provided form may be used as long it contains similar information as the UTA Statement of On-Track Safety.

3.7 ELECTRONIC MOBILE DEVICE USAGE

UTA policy is in accordance with state law as it pertains to cell phone usage while operating a motor vehicle. Additionally, Lone Workers may use a cell phone as a secondary backup line of communication to Control. An RWIC may use a cell phone as a secondary backup form of communication. Watchmen/Lookouts and flaggers may not use the cell phone while performing their duties except when given specific direction to do so by the

⁶ If two lone workers encounter each other on the ROW, they form a workgroup. They must exit the foul zone, conduct a job briefing, and enact a workgroup appropriate form of On-Track Safety. If using TAW, one of the two may be the Watchman and RWIC simultaneously, assuming he is trained to do so.

RWIC that do not violate Federal, State, or UTA policy. Other individuals may not use a cell phone while fouling the track. Cell phones or radios may not be the primary means of warning a work crew.

3.8 UTA RADIO USAGE

Any employee or contractor acting as an RWIC, Flagger, RMM Operator, or Lone Worker is required to have a UTA issued radio, and continually monitor radio traffic in the specific area in which work is being performed. A roadway worker filling one or more of these roles will receive additional training on how to properly use UTA radios, in addition to rules and expectations. Radio numbers will be issued and maintained by the UTA Department the employee or contractor reports to.

4. ON-TRACK SAFETY PROCEDURES

4.1 WORKING LIMITS

Working limits established on UTA Rail Services main lines shall conform to the provisions of 49 CFR 214.321 (exclusive track occupancy), 49 CFR 214.323 (foul time), or 49 CFR 214.325 (train coordination). The working limits established on non-controlled track shall conform to the provisions of 49 CFR 214.327 (inaccessible track), 49 CFR 214.329 (Watchman/Lookout), and 49 CFR 214.337 (Lone Worker). Track authority will only be issued from a qualified **Dispatcher/Controller** or under direct supervision of a qualified **Dispatcher/Controller**. Watchman/Lookout and Lone Worker do not automatically establish working limits unless doing so within another form of on-track safety. Working limits established under any of the above listed guidelines shall conform to the following provisions:

- 1) Only a roadway worker who is qualified to provide protection for roadway work groups may act as a RWIC as outlined in 49 CFR 214.353. The RWIC may establish control over working limits for the purpose of establishing on-track safety.
- 2) Only one RWIC shall have control over working limits on any segment of track.
- 3) The RWIC must notify all affected roadway workers before working limits are released for the operation of trains. Working limits shall not be released until all affected roadway workers have either left the track or have been afforded on-track safety through train approach warning in accordance with 49 CFR 214.329.
- 4) A roadway worker who is a member of a roadway work group shall not foul a track until on track safety is provided by the RWIC.

The RWIC or the Lone Worker (after a briefing with Control or a supervisor) will determine the method of on-track safety to be used by the roadway workers or individual and communicate the details of the selected method at the job briefing. The method of on-track safety selected shall comply with the provisions of the UTA RWP Program. This includes snow removal and weed spraying.

4.2 TEMPORARY TRACK RESTRICTIONS – TRAX OPERATIONS

4.2.1 TRAX EXCLUSIVE TRACK OCCUPANCY

Working limits established on controlled track through the use of exclusive track occupancy procedures shall comply with the following requirements:

- 1) The track within working limits must be clear of train occupancy before the transfer of authority can be given. The track shall be placed under the control of the RWIC by the Control Center and written in the Red Book by the RWIC. One of the two following methods shall apply:
 - a. Flagmen stationed at each entrance to the track within working limits and instructed by the RWIC to prevent the movement of trains and equipment into the working limits.

- b. Local Control, the RWIC may cause fixed signals at each entrance to the working limits to display an aspect indicating “Stop” by a number of methods known cumulatively as local control, listed below:
 - i. The RWIC must receive authorization from Control to place interlocking into local control and record date and time within the red book.
 - ii. Control will notify all trains and personnel to expect red signals and be prepared to stop.
 - iii. Trains will notify Control upon their arrival at the red signals.
 - iv. Control will notify the RWIC, the RWIC will then upgrade the signal for proper train movement under the direction of the Controller.
 - v. After work is completed and local control is relinquished, authority of working limits will be returned to Control.
- 2) An authority for exclusive track occupancy given to the RWIC of the working limits shall be transmitted on a work permit, by relay through a designated employee, in a data transmission, or by oral communication, to the roadway worker by the Controller who has authority over that section of track and will also be recorded in writing within the UTA issued Red Book used by the Roadway Worker.
 - a. Where authority for exclusive track occupancy is given verbally, the authority shall be written as received by the RWIC and repeated to the issuing Controller for verification. This process may be conducted by radio from the Controller to the RWIC. The RWIC must verify that the working limits, times, and locations are consistent with the written work permit information submitted to Control and repeated to the Controller for verification. The responsible RWIC shall maintain possession of the approved work permit for exclusive track occupancy while the authority for the working limits is in effect, if applicable.
 - b. The Controller and RWIC shall make a written or electronic record of all authorities issued to establish exclusive track occupancy.
- 3) The extent of working limits established through exclusive track occupancy shall be defined by one of the following physical features clearly identifiable to a Train Operator or RMM Operator⁷:
 - a. A Flagger with instructions and capability to hold all trains and equipment clear of the working limits
 - b. A fixed signal that displays an aspect indicating “Stop”
 - c. A station shown on the Block Sheet and identified by name with a sign, beyond which train movement is prohibited by train movement authority or the provisions of a direct train control system
 - d. A clearly identifiable milepost sign beyond which train movement is prohibited by train movement authority or the provisions of a direct train control system
 - e. A clearly identifiable physical location prescribed by the operating rules of the railroad that trains may not pass without proper authority

⁷ It is permissible for a roadway RWIC to relinquish a portion of previously assigned track given under exclusive track occupancy by the control center (when work on that section is complete). It will be determined by the RWIC what portion of the exclusive track may be turned back over to the control center for other use, i.e. train operations. The RWIC will give the controller a specific, well recognized landmark, i.e., station location or mile marker, where trains may operate to. These specific working limit changes will be communicated to the controller and repeated to the RWIC, who will then make changes to the work permit. These changes will also be communicated to the work crews affected by means of a follow-up job briefing by the RWIC or his designee.

- 4) Movements of roadway maintenance machines within working limits that have been established under exclusive track occupancy shall be made only under the direction of the RWIC.
 - a. Such movements shall be at restricted speed unless a higher authorized speed has been specifically authorized by the RWIC of the working limits.
 - b. An authority shall specify a unique roadway work group number, an employee name, or a unique identifier.

4.3 TEMPORARY TRACK RESTRICTIONS – FRONTRUNNER

4.3.1 TRACK BULLETIN FORM A

- 1) Form A (Temporary Restrictions) protection will be issued by FRC and placed on the Daily Operating Bulletin or issued by Mandatory Directive. Dispatch will place a Temporary Speed Restriction (TSR) on the location that is affected. The TSR will include proper PTC enforcement for the area and will include the entire track segment.
- 2) Display yellow flags as soon as possible at least 2 miles in advance of the working limits, and put in place as soon as possible.
- 3) It may be necessary to issue a track bulletin to restrict movements because of track conditions or structures before yellow flags can be displayed. When this is necessary, the information needed for the track bulletin should be given to the FrontRunner Dispatcher (FRC) with instructions "flags not yet displayed".
- 4) Green flags are used to signal that the train may resume speed once the controlling cab of the train is past the green flag. Therefore, green flags should be placed one train length beyond the end of the temporary speed restriction.

4.3.2 TRACK AND TIME LIMITS

Working limits established on controlled track through the use Track and Time shall comply with the following requirements.

Authority for Track and Time is issued to the RWIC by the FRC Dispatcher will maintain a record of all Track and Time authorities granted, and the RWIC, through use of the Redbook.

- 1) FRC will verify that the limits are clear, and place PTC blocking mechanisms on the affected areas.
- 2) FRC will then contact the RWIC via radio and issue the authority, including a unique authority number, and time limits for the authority.
- 3) The RWIC will then repeat the authority granted, including location, authority number and time limit.
- 4) If the RWIC readback is correct, the dispatcher will acknowledge and issue an "OK" time and give the dispatcher identification number to the RWIC. The Track and Time is not authorized until the RWIC understands and repeats the Track and Time granted and receives an OK time and dispatcher identification number, and the RWIC properly reads back OK time and dispatcher number.
- 5) PTC blocking must not be removed until Track and Time has been released to the dispatcher. Other roadway worker crews or the movement of trains are not authorized into the limits unless also granted Track and Time.

- 6) Track and Time must be released before the time granted expires. Otherwise, Track and Time remains in effect until released by the RWIC to FRC.
- 7) When joint Track and Time is granted to protect roadway workers, trains must not receive Track and Time within the same limits, unless the trains and RWIC have a proper job briefing understanding of the work being performed and movements being made.
- 8) Machinery, hi-rail vehicles, track cars, or roadway workers will receive Track and Time in the same manner as trains.
- 9) Machinery, hi-rail vehicles, track cars, or roadway workers must be clear of limits before the employee granted Track and Time releases authority.
- 10) The RWIC must notify the FRC dispatcher when the work is complete, and the track is safe for train passage.
- 11) All movement within the Joint Track and Time must be made at restricted speed.
- 12) If additional time for Track and Time is necessary, an authority must be obtained by the RWIC from the Dispatcher before the time expires.
- 13) Movements of trains and roadway maintenance machines within working limits established through exclusive track occupancy shall be made only under the direction of the RWIC of the working limits.
- 14) A separate roadway worker work group afforded on-track safety by the RWIC of the authority limits, and that is located away from the RWIC of authority limits shall:
 - a. Occupy or foul the track only after receiving permission from the RWIC to occupy the working limits after the roadway worker in charge has made communication.
 - b. Be accompanied by an employee qualified to the level of a RWIC shall also have a copy of the authority and who shall independently execute the required communication requirements.
- 15) After the roadway worker in charge has confirmed that the affected trains have passed the point to be occupied or fouled, the roadway worker in charge shall record on the authority the time of passage and engine number of the affected train. If the confirmation is by direct communication with the train or through confirmation by the train dispatcher or control operator, the RWIC shall record the time of such confirmation and the engine number of the affected trains on the authority.

4.3.3 TRACK AND TIME EXAMPLES

4.3.3.1 Track and Time Verbal Authority

Track and Time verbal authority must be given as follows:

- | | |
|------------|---|
| MOW | UTA MOW [ID] to UTA Warm Springs Control, over. |
| Dispatcher | UTA Warm Springs Control, over. |
| MOW | MOW [ID] request Track and Time on the mainline from [location] to [location] (including or not including siding) until [time], over. |
| Dispatcher | MOW [ID], control understands you are requesting Track and Time from [location] to [location] until [time], over. |
| MOW | MOW [ID], that is correct. Over. |

Dispatcher (will block the track) Control acknowledges Repeat. You are granted Track and Time with authority number [authority number] on [track], (including or not including siding) between [location] to [location] until [time] Over.

MOW MOW understands Track and Time with authority number [authority number] on [track], (including or not including siding) between [location] to [location] until [time]. Over.

Dispatcher That is correct. Your OK time is [time] by [Dispatcher ID]. Over.

MOW MOW [ID] understands my OK time is [time] by [Dispatcher ID]. Over.

Dispatcher MOW that is correct. Control out.

Note: Immediate access may not be granted, and the roadway worker crew may be placed on “stand by”, as the dispatcher establishes that the limits are clear and can be protected. Once the dispatcher has granted authority the RWIC will have control of the track until the designated time.

4.3.3.2 Additional Track and Time

Dispatcher UTA Warm Springs Control to UTA MOW [ID], over.

MOW UTA MOW [ID], over.

Dispatcher MOW [ID] Track and Time with authority number [authority number] on [track], between [location to [location] has extended to [time] by dispatcher [ID], over.

MOW MOW [ID] understands Track and Time with authority number [authority number] on [track], between [location] to [location] has been extended to [time] by dispatcher [ID], over.

Dispatcher That is correct. Your OK time is [time] by [Dispatcher ID]. Over.

MOW MOW [ID] understands my OK time is [time] by [Dispatcher ID]. Over.

Dispatcher MOW [ID] that is correct; Control out.

4.3.3.3 Releasing Track and Time

MOW UTA MOW [ID] to UTA Warm Springs Control, over.

Dispatcher UTA Warm Springs Control, over.

MOW Track and Time with authority number [number] between [location] to [location] is released at [time].

Dispatcher MOW [ID] Track and Time with authority number [number] between [location] to [location] is released at [time] over.

MOW That's correct. MOW [ID] Out.

Note: Track and Time must be released before time granted expires, by stating identification, Track and Time authority number, and Track and Time limits being released.

4.3.4 YELLOW/RED FLAG, TRACK BULLETIN FORM B

Working limits established on controlled track using track bulletin Form B shall comply with the following requirements:

- 1) Protection by track bulletin Form B is authorized to the RWIC by UTA FRC.
- 2) The Track Bulletin Form B will contain all conditions that affect safe train movements and are issued as required by the Dispatcher and are implemented and enforced by the Positive Train Control system.
- 3) Form B track bulletins must not be changed unless specified by Rules 15.1.1 (GCOR Changing Address of Track Warrants or Track Bulletins) and 15.13 (GCOR Voiding Track Bulletins).
- 4) The track within the Form B working limits shall be placed under the authority of the RWIC. All train or equipment movements within the Form B limits shall proceed on the authority of the RWIC.
- 5) Trains within the limits during the time stated in the track bulletin Form B, must; stop short of a red flag, and proceed on the RWIC instruction using the No Code Proceed function.
- 6) The RWIC will be responsible for the proper placement of yellow-red flags (GCOR rule 5.4.3) and red flags (GCOR rule 5.4.7) as a warning to trains or equipment to be prepared to stop at the instruction of the RWIC.
- 7) Yellow/red flags must be displayed two miles in advance of each entrance of the Form B limit, up to one hour before to one hour after the track bulletin Form B comes into effect.
- 8) In the event that the Form B limit is less than two miles from a terminal, siding, or station, the RWIC will display the yellow-red flags less than two miles before the Form B area. This information will be included on the track bulletin.
- 9) Track bulletin Form B may be used to protect on-track equipment, such as rail detector cars, without using flags. Identify protected equipment in the track bulletin.
- 10) While trains, engines, and protected equipment are in track bulletin limits, they will otherwise be governed by Rule 15.2 (Protection by Track Bulletin Form B).
- 11) The same track bulletin must not protect other roadway worker crews and equipment.
- 12) After the roadway worker in charge has confirmed that the affected trains have passed the point to be occupied or fouled, the roadway worker in charge shall record on the authority the time of passage and engine number of the affected train.
 - a. If the confirmation is by direct communication with the train or through confirmation by the train dispatcher, the RWIC shall record the time of such confirmation and the engine number of the affected trains on the authority.

4.3.4.1 Verbal Permission

When granting verbal permission, use the following words:

- RWIC RWIC [ID] to Train [number], using track Bulletin Form B [number], Line [number], between MP [location] and MP [location], Train [train number] [direction], after stopping at the red board located at MP [location], and after requesting No Code Proceed from control, you are authorized to pass the red board and enter my limits at speed, over.

- Operator Train [number] understands that after stopping at the red board located at MP [location], Train [number] is authorized to pass the red board and proceed through the limits at speed using No Code Proceed after contacting control for authorization, over.

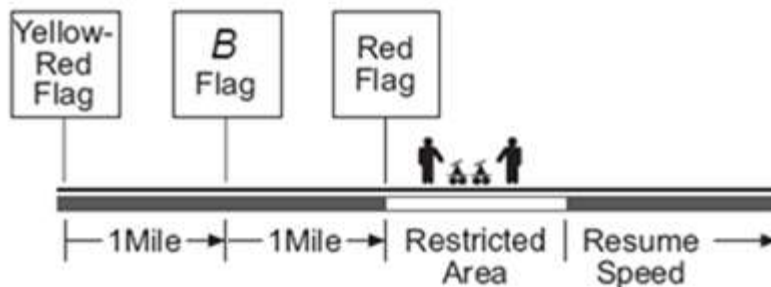
- RWIC Train [number], that is correct. RWIC [ID], out.

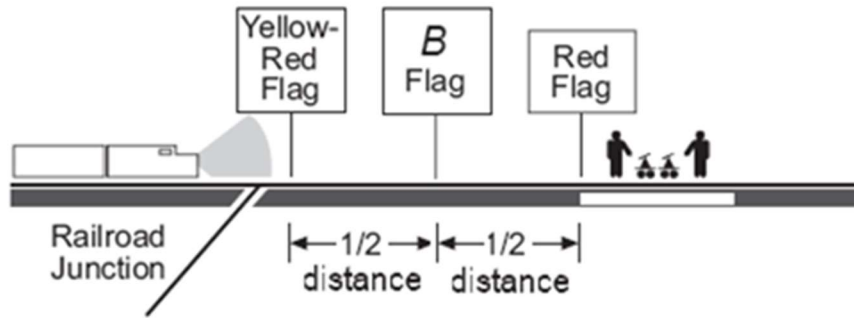
4.3.4.2 Repeat Instructions

A Train Engineer must repeat the above instructions, and the RWIC must acknowledge them as correct before they can be followed.

4.3.5 YELLOW/RED FLAG, NO FORM B TRACK BULLETIN IN EFFECT

- 1) The RWIC shall be responsible for placing yellow/red flags two miles prior to the red flag and the restricted area.
- 2) The RWIC may give the train permission to pass the red flag specifying:
 - a. Exact location of red flag
 - b. Speed
 - c. Distance





- 3) A 'B' Flag will also be posted half the distance between the Yellow-Red Flag and the Red Flag.

4.4 TEMPORARY TRACK RESTRICTIONS – BOTH TRAX AND FRONTRUNNER

4.4.1 TRACK REMOVED FROM SERVICE (TRACK OUT OF SERVICE)

To establish working limits by removing a track from service:

- 1) Authority to remove track from service is issued by track permit, indicated on the daily operating bulletin, to the RWIC by the dispatcher/controller.
- 2) Before the track is removed from service, it must be protected using the appropriate blocking tool.
- 3) The RWIC will request track removed from service by designating the track and naming the points at each end of the track out of service to the dispatcher/controller.
- 4) The RWIC will copy and repeat the permit information to the dispatcher/controller.
- 5) Trains must not use the track unless the track permit states the name or title of the RWIC who may authorize use and the RWIC directs all movements within the working limits. Movements must be made at restricted speed.
- 6) The RWIC will release the track back to Control when protection is no longer in needed.
- 7) The dispatcher/controller will then remove protection for that segment of track as specified by the RWIC.

4.4.2 FOUL TIME

Working limits established on controlled track using Foul Time shall comply with the following requirements.

Authority for Foul Time is issued to the RWIC by the Dispatcher/Controller. Control will maintain a record of all Foul Time authorities granted, and the RWIC, through use of the Red Book.

- 1) The RWIC requesting Foul Time will contact Control and state craft, identification number, location and request the control point to be protected.
- 2) Control will verify that the limits are clear, and place PTC blocking mechanisms on the affected control point.
- 3) Control will then contact the RWIC via radio and issue the authority, including a unique authority number, and time limits for the authority.

- 4) The RWIC will then repeat the authority granted, including location, authority number and time limit.
- 5) If the RWIC read back is correct, the **Dispatcher/Controller** will acknowledge and issue an “OK” time and give the **Dispatcher/Controller** identification number to the RWIC. The Foul Time is not authorized until the RWIC understands and repeats the Foul Time granted and receives an OK time and **Dispatcher/Controller** identification number, and the RWIC properly reads back OK time and **Dispatcher/Controller** number.
- 6) Foul Time must be released before the time granted expires. Otherwise, Foul Time remains in effect until released by the RWIC to Control.
- 7) If additional time is necessary, authority must be obtained by the RWIC from Control before the time expires.
- 8) **PTC blocking must not be removed until Foul Time has been released to Control.**

4.4.3 TRAIN COORDINATION

Working limits established by the roadway worker in charge through the use of train coordination shall comply with the following requirements:

- 1) Working limits established by train coordination shall be within the segments of track or tracks upon which only one train holds exclusive authority to move.
- 2) The roadway worker in charge establishes working limits by train coordination shall communicate with a member of the crew of the train holding the exclusive authority to move, and shall determine that:
 - a. The train is visible to the roadway worker who is establishing the working limits.
 - b. The train is stopped.
 - c. Further movements of the train will be made only as permitted by the roadway worker in charge of the working limits while the working limits remain in effect.
 - d. All train movements must be made at restricted speed.
 - e. The crew of the train will not give up its exclusive authority to move until the RWIC in charge of the working limits has released the working limits to the train crew.

4.4.3.1 Train Coordination Verbal Authority

Script template:

RWIC	UTA (MOW, SUPERVISOR, ETC.) [ID] at [Location] to UTA Train [number], over.
TRAIN	UTA Train [number] over.
RWIC	Train [number] I will be [throwing switch/performing task] at [location]. Verify you are stopped and train is set and centered. Over.
TRAIN	Train [number] understands [RWIC Designator] will be [performing task] at [location]. Train is set and centered. Over.
RWIC	Copy train is set and centered, UTA [RWIC Designator] out.

Once task is complete:

RWIC UTA [MOW, SUPERVISOR, ETC.] [ID] to UTA Train [number] over.

TRAIN Train [number] over.

RWIC I have completed [task] and I am clear, proceed on **Dispatcher/Controller's** instructions, over.

TRAIN Train [number] understands [RWIC Designator] has completed [task] and all personnel are clear. Train will proceed on **Dispatcher/Controller's** instructions. Train [number]. Out.

4.4.3.2 Train Coordination Example

Script example for throwing a switch:

RWIC UTA MOW 302 at Hill South to UTA Train #2 over.

TRAIN UTA train 2 over.

RWIC Train 2, I will be throwing the switch at Hill south, verify you are stopped, and train is set and centered over.

TRAIN Train 2 understands MOW will be throwing the switch at Hill south. Train 2 is set and centered. Over

RWIC Copy train 2 is set and centered, MOW 302 out.

Once Switch is thrown and locked:

RWIC UTA MOW 302 to UTA train 2. Over

TRAIN Train 2 over.

RWIC Train 2, the switch is lined for your move, and I am clear. Proceed on **Dispatcher/Controller's** instructions over.

TRAIN Train 2 understands switch is lined for my move, and all personnel are clear of the alignment at Hill south. I will proceed on **Dispatcher/Controller's** instructions. Train 2 out.

4.5 INACCESSIBLE TRACK

Working limits may be established on controlled and non-controlled tracks by use of the provisions of inaccessible track. Controlled track could include mainline track, signaled sidings, crossovers, and interlockings. Non-controlled tracks consist of yard tracks, industrial leads or spurs, and non-controlled sidings. The RWIC, or the Lone Worker using inaccessible track, shall make the working limits physically inaccessible to trains or

roadway maintenance machines that are not part of the workgroup at each possible point of entry by using one or more of the following:

- 1) Lining a switch or derail to prevent access to the working limits with an appropriate target or flag. The switch or derail shall be securely locked with an effective securing device by the roadway worker in charge of working limits.
- 2) Placing a Flagger to hold all trains and equipment clear of the working limits at each possible point of entry.
- 3) Placing portable derails (and locked with designated locks) with appropriate targets or flags. A warning device should be placed approximately 150 feet in advance of the derail, if possible, from the working limits to prevent movement into the working limits.
- 4) Establishing discontinuity in the rail to prevent movement into the working limits. Rail that has been taken out of service by the removal of rail will be properly flagged and marked out of service.
- 5) A remotely controlled switch aligned to prevent access to the working limits and secured by FrontRunner or TRAX Control. The **Controller/Dispatcher** of the remotely controlled switch will apply a blue block on the TDX system to lock the switch. The **Controller/Dispatcher** is not permitted to remove the locking or blocking device from the switch until receiving permission to do so from the roadway working in charge who established the working limits.

When it is necessary to foul an adjacent track, one of these methods shall be used to establish on-track safety on an adjacent track. Work trains and roadway maintenance machines within working limits established by means of inaccessible track, shall move only under the direction of the RWIC of the working limits, and shall move at restricted speed.

No train or roadway maintenance machines, except those present or moving under the direction of the RWIC of the working limits, shall be located within the working limits established by means of inaccessible track.

4.6 INDIVIDUAL TRAIN DETECTION

Individual train detection (ITD) may be used only by a Lone Worker. A Lone Worker who is fouling a track while performing routine inspection or minor correction work may use ITD to establish on-track safety only outside of a manual interlocking or a control point. A Lone Worker retains the absolute right to use on-track safety procedures other than ITD if the situation requires it. ITD may be used to establish on-track safety only if approved during the Lone Worker's Safety briefing, and only if the below-specified conditions of this section are met:

- 1) The Lone Worker is trained, qualified, and designated to employ ITD to ensure on-track safety.
- 2) The Lone Worker may not occupy any position or engage in any activity that would interfere with the ability to detect the approach of trains or equipment in either direction.
- 3) The Lone Worker must be able to visually detect the approach of trains or equipment moving at maximum speed and is capable of moving to a place of safety at least 15 seconds before their arrival. The place of safety shall not be on a track unless working limits have been established on that track.
- 4) No power operated tools or machines may be in use within hearing range of the Lone Worker.
- 5) The ability of the Lone Worker to hear and see approaching trains and equipment is not impaired by:
 - a. Background noise
 - b. Lights

- c. Inclement weather such as rain, snow or fog
 - d. Passing trains
 - e. Other physical conditions (curves or structures)
- 6) The Lone Worker must complete the statement of on-track safety, a copy of which is included in this Program. The statement shall show the maximum authorized speed of trains within the working limits for which it is prepared, and the sight distance that provides the required warning time of 15 seconds before the approaching trains. The Lone Worker using individual train detection to establish on-track safety shall produce a completed copy of the statement of on-track safety form when requested by a representative of UTA, UDOT, or FRA.
 - 7) Lone Workers are not allowed to utilize equipment or material that cannot be readily removed by hand.

4.6.1 NO GO AREAS FOR INDIVIDUAL TRAIN DETECTION

The locations listed in this section are not suitable for Lone Workers using Individual Train Detection. Another form of On-Track Safety must be used for any Lone Worker who will be active in the following areas.

4.6.1.1 TRAX Non-ITD Locations

Blue Line

- North of Meadowbrook Station, North and South Bound track.
- 5300 South Bridge, North Bound and South Bound track.
- 12300 South to Draper Town Center.

Red Line

- Health Science Interlocking to Wasatch Drive
- 1500 East to 1400 East (Fieldhouse Crossover Area)
- 900 East to 1100 East (S-Curve)
- Ephraim Interlocking
- UP Tunnel to 6960 crossing
- 7800 South Bridge

Green Line

- East Interlocking to 3700 West
- Union Interlocking to Andy Ave.
- Roper Bridge to ZCMI Interlocking
- Jordan River Bridge to 1070 crossing
- East of Chesterfield crossing

S-Line

- Transfer Station to East of the curve to the substation

4.6.1.2 FrontRunner Non-ITD Locations

FrontRunner North

- 200 South to 600 West
- 900 North to 1050 North
- Woods Cross South switch to station
- Ogden Flyover

FrontRunner South

- Murray South to 5900 South
- 9400 South Flyover to 10000 South
- Bangerter Highway Bridge
- 2100 North Bridge

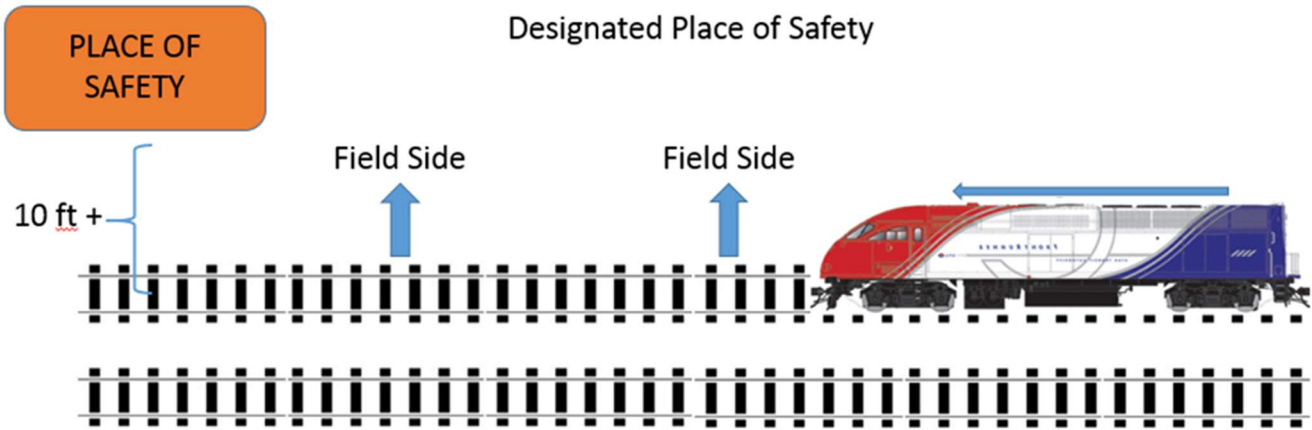
4.7 TRAIN APPROACH WARNING (TAW) BY WATCHMAN/LOOKOUT

A roadway worker who is a member of a work group, who may foul a track outside of the working limits of any project, may provide for on-track safety by using a Watchman/Lookout who provides Train Approach Warning, provided that:

- 1) The train approach warning can be given in time to allow each roadway worker to move to a previously arranged place of safety and be clear of the foul zone at least 15 seconds before the arrival of the train. Each roadway worker must be in a position to receive a TAW.
 - a. The predetermined place of safety may not be on or across any track unless OTS has been established on the track(s) in question.
- 2) The Watchman/Lookouts assigned to provide TAW shall devote their entire attention to the detection of approaching trains and providing warning to the roadway worker. The Watchman/Lookouts may not be assigned other duties while functioning as a Watchman/Lookout and they must remain at their lookout position until the RWIC determines that protection is no longer necessary or designates another Watchman/Lookout in a follow up job briefing to relieve the roadway worker.
- 3) The means used to communicate a train approach warning shall be distinctive and clearly understood and agreed upon in a job briefing, regardless of noise or distraction of work regardless of the direction or position the employee is working. The means used will consist of:
 - a. Visual: The Watchman/Lookout tapping their own head while an air horn is sounded.
 - b. Audible: Shouting "HOT RAIL" or sounding an air horn, followed by train direction.
 - c. Physical: Standing near roadway worker and physically tapping the hard hat.
- 4) The RWIC may provide the train approach warning by designating himself/herself as the Watchman/Lookout as long as he/she is not performing any other duties.
- 5) Radio may not be used as a primary means of TAW, but may supplement.
- 6) The method of train approach warning must be agreed upon by the entire work party
- 7) Watchman/Lookout must have all required roadway worker equipment including at a minimum
 - a. Working UTA radio
 - b. Reflective safety vest
 - c. Hardhat
 - d. Audible and physical warning materials
 - e. RWP Manual

4.8 DESIGNATED PLACE OF SAFETY

During the on-track safety job briefing, a designated place of safety for workers and equipment to clear to should be clearly identified. The designated place of safety must be outside the foul zone and provide an unimpeded path to its location. Where possible, places of safety should be located on the field side of the track.

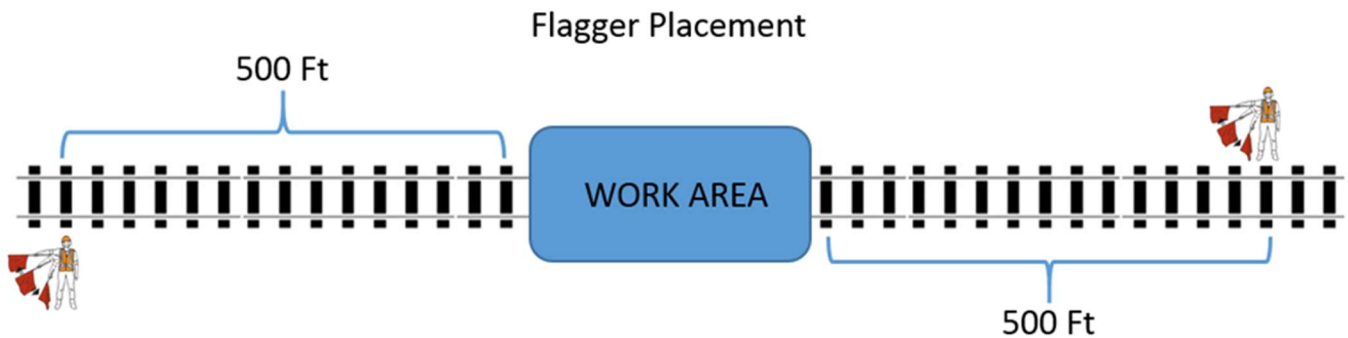


4.9 FLAGGER

The presence of a Flagger on a non-controlled or controlled track requires a complete stop by the Operator/Engineer of any train or roadway maintenance machine. The Operator/Engineer of a train or roadway maintenance machine may not proceed past the Flagger without receiving a signal to proceed.

An advisory/mandatory directive acknowledged by all trains and employees including speed restrictions and expectations must be issued by Control/Dispatch before a flagman can be utilized as a form of track safety.

A Flagger must stand at the outsides of the established working limits of all affected track at a sufficient distance from the working limit to allow a train or roadway maintenance machine operator to see him and come to a complete stop prior to the working limit. A Flagger cannot leave unless he receives confirmation that all roadway workers and equipment are clear of the track or is relieved by another Flagger. All flags used for these purposes will be red in color.



4.10 MOVEMENT WITHIN WORKING LIMITS

When Operators or Engineers of trains or roadway maintenance machines encounter a Flagger, they shall stop and not proceed unless authorized to do so by the Flagger who will receive authorization from the RWIC of the working limits.

Trains or roadway maintenance machines that are proceeding through the working limits shall abide by the speed provided by the RWIC. The train or roadway maintenance machine should also be able to stop within half the range of vision short of any obstruction.

4.11 OVERHEAD CATENARY ELECTRICAL HAZARDS

A 750-volt DC electrical power source parallels the UTA (TRAX) corridors at a height of approximately 22 feet⁸ to provide electricity for light rail operation. Electrical substations throughout the TRAX corridor provide DC voltage to the overhead catenary system (OCS) to power the light rail. The rail acts as the negative voltage return to the substations during light rail train operation. Several potential hazards exist, and workers must be aware of these hazards. Proper permits and approval must be received prior to performing work on or near (within ten feet) of the OCS.

Work performed within the TRAX corridor must maintain a ten-foot clearance from the overhead catenary wire. If work needs to be performed closer than 10 feet, electrical power must be shut off. Personnel will make this request through the track access coordinator. Trained MOW personnel may perform routine inspections or light maintenance while the OCS is energized.

An electrical power outage must be accompanied by track access permit and Removal of Traction Power form. Track access will be issued by the track access coordinator in advance or lead controller the day of work. The RWIC of the work group will be responsible to maintain his portion of the Removal of Traction Power form as well as placing a Lock-Out/Tag-Out (LOTO) lock on the appropriate electrical breaker.

In addition to turning off the electrical power, a grounding cable will be attached from the overhead line to the rail. Placement of the grounding cable or cables will be determined by qualified MOW personnel, MOW supervisors or systems engineering.

Roadway workers will establish working limits by placing a red flag, cone, or other stop indication outside of the established working limits or establishing a stop aspect to prevent any roadway maintenance machine or light rail vehicle from entering the grounded section of OCS.

The RWIC will guarantee that all personnel are clear of the OCS prior to having the working limits re-energized. Maintenance of way personnel (or other qualified personnel) will remove grounding cables. LOTO tags and locks will also be verified and removed.

Always assume that the electrical lines are energized or “hot.” Never make contact with the rail and OCS lines at the same time. Never cut or disconnect a section of rail without an approved work permit and approved jumper cables in place.

⁸ OCS height can vary from 14 ft. 6 inches under the I-15 interchange to 22 ft. 3 inches on ballasted track.

The following safety procedures have been established to accomplish work on or near the OCS.

4.11.1 ROUTINE REMOVAL OF POWER

The Controller must coordinate the request for removal of electrical power with the designated MOW employee. The work permit must be kept by the designated MOW employee to identify the proper locations to be de-energized.

The MOW Supervisor or a designated employee will lock out/tag out all sources of high-voltage power that are being de-energized to enable personnel to work within the restricted area safely. The Removal of Traction Power form must be completed at this time.

The MOW Supervisor or a designated employee must:

- 1) Verify the following items on the Work Permit which requires removal of traction power.
 - a. Ensure work permit is active.
 - b. Verify MOW employee or contractor's name, permit number, and contact information.
 - c. Verify working limits on the permit are correct.
- 2) Brief the Controller in preparation for power removal.
- 3) Verify that area is secured and approved stop indications are properly positioned, if required.
- 4) Request and obtain a Controller's authorization to de-energize.
- 5) Verify that appropriate safety precautions have been taken, proper procedures have been followed and power is de-energized.
- 6) Verify that locks are attached to open and disconnected breakers or switches.
- 7) Check the voltage on the catenary and make sure it is grounded, if required.
- 8) Retain a copy of the work permit.

4.11.2 ROUTINE RESTORATION OF POWER

The Controller must coordinate the request for restoration of power with the MOW employee.

MOW Supervisor or a designated employee must:

- 1) Verify the following items on the Work Permit which requires removal of traction power.
 - a. Ensure work permit is active.
 - b. Verify MOW employee or contractor's name, permit number, and contact information.
 - c. Verify working limits on the permit are correct.
- 2) Verify removal of all ground straps, cones, stop indications, and derails.
- 3) Verify that the Mainline is clear and ready to energize.
- 4) Remove the locks to energize the overhead.
- 5) Re-energize the system.
- 6) Verifies that flags, cones, or stop indications have been removed and the overhead power is now available for service.

Specific job requirements and requests must be made prior to any work being performed in the TRAX rail corridors. Questions or concerns relating to specific situations should be addressed to the TRAX Access Coordinator, Assistant Manager over Line and Signal, or MOW supervisor for clarification.

4.11.3 EMERGENCY SHUTDOWN FOR ACCIDENT RECOVERY

In the event of a severe accident, such as a derailment or failure of an OCS pole, the outside chassis of the TRAX car may become energized. If a passenger or first responder completes the circuit by touching the train while touching the ground, there is a significant risk of electrocution. MOW personnel are expected to test for voltage between the ground and car using a catenary voltage meter before allowing rescue personnel to board the train or passengers to exit. If there is a difference in potential, then the shutdown procedure is followed.

4.12 NON-CONTROLLED TRACK

4.12.1 SPEED RESTRICTIONS OUTSIDE MAIN TRACK/BLOCK SYSTEM

Except when moving on a main track or on a track where a block system is in effect, trains, or engines, and RMMS must move at restricted speed.

4.12.2 SERVICING AND CAR REPAIR TRACK AREAS

Blue signal protection outlined in 49 CFR 218 subpart b will be utilized in performance of duties incidental to inspecting, testing, servicing, or repairing rolling equipment when those incidental duties involve fouling a track. These provisions apply to all UTA employees and contractors.

Any work performed within the limits of a locomotive servicing or car shop repair track area with the potential of fouling a track which requires a person qualified under 49 CFR 213.7 to be present to inspect or supervise such work must be performed in accordance with the requirements.

Blue Flag protection can be used in the servicing area and car repair track areas in conjunction with the Roadway Worker Protection program.

5. ADJACENT CONTROLLED TRACK PROCEDURES

5.1 APPLICABILITY

This chapter applies to tracks with centers at 19 feet or less. An RWIC may deem that adjacent track rules apply even though track centers are greater than 19 feet and/or if speeds are less than noted below. The RWIC may implement adjacent track procedures and establish working limits as a solution to these hazards.

In 2014, FRA issued new guidance for protecting roadway workers while performing work on adjacent controlled tracks. In summary, these rules stipulate when work may continue depending upon the proximity of other controlled tracks and the speed at which equipment moves on those tracks. On occasion, equipment or fencing may be used as inter-track barriers. The inter-track barrier must be of continuous permanent or semi-permanent construction and at least 48" in height. The best explanation of these requirements is given in the diagrams and tables below.

5.1.1 GENERAL RULE FOR ADJACENT TRACK APPLICABILITY

On track safety is required for each adjacent controlled track when a roadway work group with at least one of the roadway workers on the ground is engaged in a common task with on-track, self-propelled equipment or coupled equipment on an occupied track. The required on-track safety (see [SECTION 4 ON-TRACK SAFETY PROCEDURES](#)) shall be established through working limits, and/or train approach warning provided by Watchmen/Lookouts.

5.2 CLARIFICATION OF ADJACENT TRACK PROCEDURES

5.2.1 SIMPLIFICATION

49 CFR 214.336 is worded such that a movement on adjacent tracks requires the same actions as multiple movements. For the sake of clarity, this redundancy has been simplified in this chapter. Additionally, PPOS is clearly defined in [1.2 DEFINITIONS](#), thereby eliminating a redundant note in section [5.3 SAFETY PROCEDURES FOR ADJACENT TRACKS](#). Section [5.3 SAFETY PROCEDURES FOR ADJACENT TRACKS](#) contains two explanatory notes. These are included here for easy reference:

Note 1: On-ground work is prohibited in the areas 25' in front and 25' behind equipment on the occupied track (No. 2) and must not break the plane of a rail on No. 2 towards a side of No. 2 unless work is permitted on that side. Note, however, that per 49 CFR 214.336(a)(2), work would no longer be permitted to continue on or between the rails of the occupied track during movement on an adjacent controlled track at 25 mph or less (or at 40 mph or less for passenger trains or other passenger on-track equipment movement. If there is a simultaneous movement on the other adjacent controlled track at more than 25 mph (or at 40 mph for passenger train movements or other passenger on-track equipment movements).

Note 2: Work that does not break the plane of the near-running rail of the occupied track (No.2) is not required to cease during such movements; Work that breaks the plane of the near-running rail of the occupied track may also continue: 1) during the times that work is permitted on or between the rails of the occupied track in accordance with 49 CFR 214.336(c) (Procedures for adjacent-controlled-track movements 25 mph or less, or 40 mph or less for passenger train movements or other passenger on-track equipment movements); or 2) if such work is performed alongside or within the perimeter of a roadway maintenance machine or coupled equipment in accordance with 49 CFR 214.336(e)(2).

5.2.2 PROCEDURES FOR ADJACENT-CONTROLLED-TRACK MOVEMENTS OVER SPEED

If a train or other on-track equipment is authorized to move on an adjacent controlled track – including 3 track areas, at a speed greater than 25 mph, or at a speed greater than 40 mph for a passenger train or other passenger on-track equipment movement – each roadway worker in the roadway work group that is affected by such movement must comply with the following procedures:

- 1) Cease work and occupy a Predetermined Place of Safety (PPOS).
- 2) Resume work once the all-clear is given by the Watchman/Lookout or RWIC only after the trailing end of the train has cleared the working limits. If a train stops within the working limits, work will not be authorized.
- 3) All track movements will adhere to the lowest authorized speed.

5.2.3 PROCEDURES FOR ADJACENT-CONTROLLED-TRACK MOVEMENTS AT OR BELOW SPEED

If a train or other on-track equipment is permitted to move on an adjacent controlled track, including 3 track areas, at a speed of 25 mph or less, or at a speed of 40 mph or less for a passenger train or other passenger on-track equipment movement, each roadway worker in the roadway work group that is affected by such movement must comply with the procedures listed in [5.2.2 PROCEDURES FOR ADJACENT-CONTROLLED-TRACK MOVEMENTS OVER SPEED](#), except that equipment movement on the rails of the occupied track and on-ground work performed exclusively between the rails (i.e., not breaking the plane of the rails) of the occupied track may continue, provided that no on-ground work is performed within the areas 25 feet in front of and 25 feet behind any on-track, self-propelled equipment or coupled equipment permitted to move on the occupied track. All track movements will follow the most restrictive authorized speed.

5.2.4 PROCEDURES FOR COMPONENTS OF RMM FOULING ADJACENT CONTROLLED TRACK

RMM shall not foul adjacent tracks unless working limits have been established on the adjacent controlled track and movements permitted within the working limits by the roadway worker in charge that would affect any of the roadway workers engaged in a common task with such machine.

5.3 SAFETY PROCEDURES FOR ADJACENT TRACKS

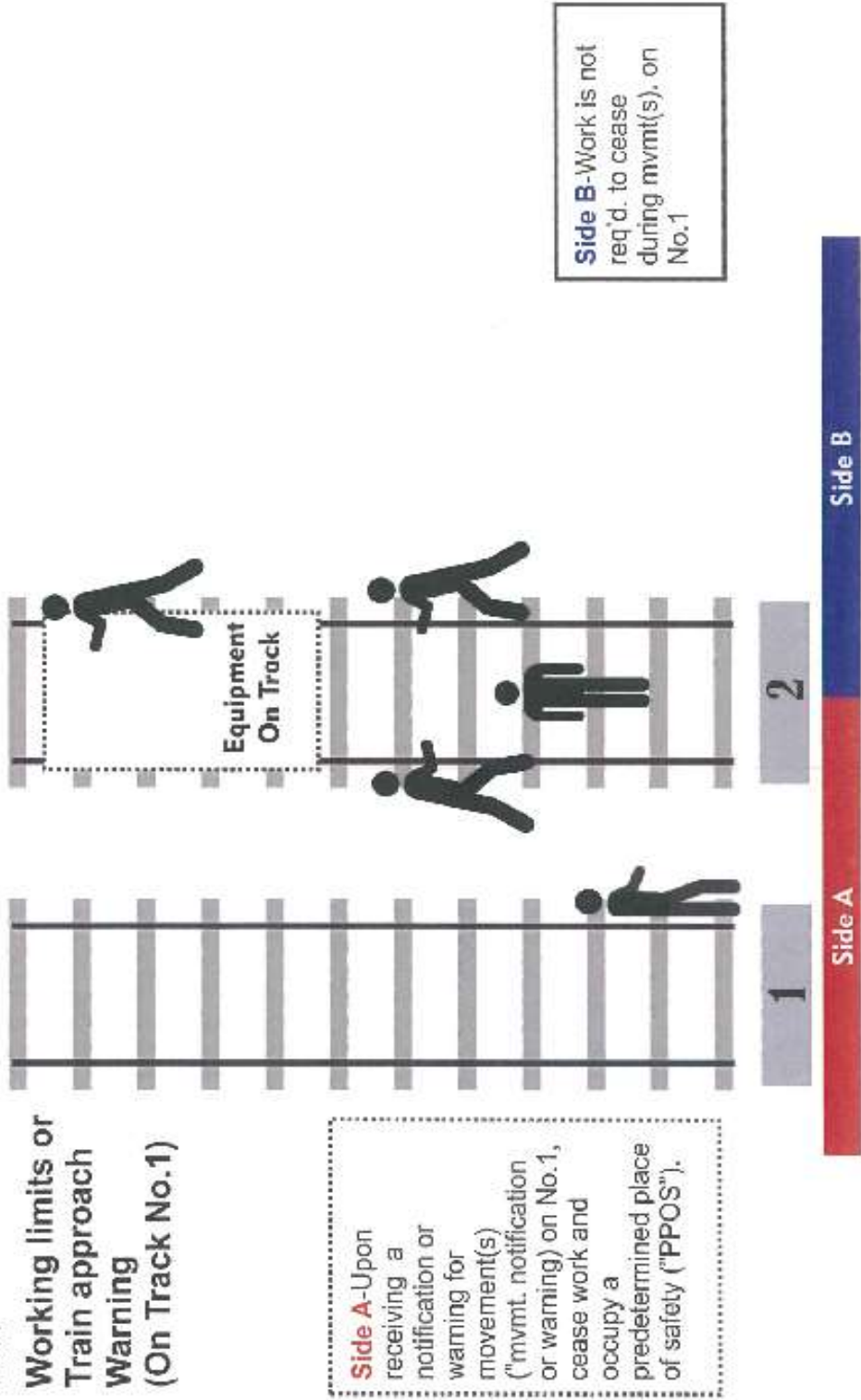
Example number/ Diagram number	“Side A” of the occupied track – the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track (“No 1’ Track” or “No. 1”)		On or between the rails of the occupied track (“No. 2’ Track” or “No. 2”) where on-track safety is established through Working Limits	“Side B” of the occupied track – either (1) the side with no adjacent track or (2) the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track (“number 3’ track’ or “No. 3”)	
	Method of On-Track Safety On Side A	Requirement	Requirements	Requirements	Method of On-Track Safety on Side B
5.4.1	Working limits or train approach warning.	Upon receiving a notification or warning for movements for No. 1, cease work and occupy a PPOS	Upon movement notification or warning for No. 1, cease work and occupy a PPOS, except work may continue during movements on No. 1 Auth’d as 25mph or less (or 40mph or less for passenger train movements) if maintaining 25’ spacing. Note 1	Work (Note2) is not required to cease movement during movements on No. 1	Not applicable (N/A) because there is no adjacent track.
5.4.2	Working limits	Upon movement notification for No. 1, cease work and occupy a PPOS. Work (Note 2) is not required to cease during movements on No. 3	Upon movement notification for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movements on No. 1 or No. 3 auth’d at 25mph or less (or at 40 mph or less for passenger train movements) if maintain 25’ spacing. (Note 1)	Upon movement notification for No. 3, cease work and occupy a PPOS. Work (Note 2) is not required to cease during movements on No. 1	Working limits.

5.4.3	Working limits	Upon movement notification for No. 1, cease work and occupy a PPOS. Work (Note 2) is not required to cease during movements on No. 3	Upon movement notification for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movements on No. 1 or No. 3 auth'd at 25mph or less (or at 40 mph or less for passenger train movements) if maintain 25' spacing. (Note 1)	Upon movement warning for No. 3 or notification for No. 1, cease work and occupy a PPOS.	TAW
5.4.4	Train approach warning.	Upon movement warning for No. 1, or No. 3, cease work and occupy a PPOS.	Upon movement warning for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth'd at 25mph or less (or at 40 mph or less for passenger train movements) if maintain 25' spacing. (Note 1)	Upon movement warning for No. 1 or No. 3 cease work and occupy safety PPOS.	TAW
5.4.5	None, but with inter-track barrier.	Work is prohibited on No. 1 and up to barrier ("Side A1"). Work is not required to cease between barrier and near running rail of occupied track ("Side A2") during movement(s) on No.1	Work is not required to cease during movement(s) on No. 1	Work is not required to cease during movement(s) on No. 1	N/A because there is no adjacent track.

<p>5.4.6</p>	<p>None, but with inter-track barrier.</p>	<p>Work is prohibited on Side A1. Work (Note 2) is not required to cease on Side A2 during movement(s) on No. 1 or No. 3.</p>	<p>Work is not required to cease during movement(s) on No. 1. Upon movement notification or warning for No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 3 auth'd at 25mph or less (or at 40mph or less for passenger trains) if maintain 25' spacing. (Note 1)</p>	<p>Upon movement notification or warning for No. 3, cease work and occupy a PPOS. Work (Note 2) is not required to cease during movement(s) on No. 1.</p>	<p>Working limits or TAW</p>
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5.4.1

Working limits or Train approach Warning (On Track No.1)



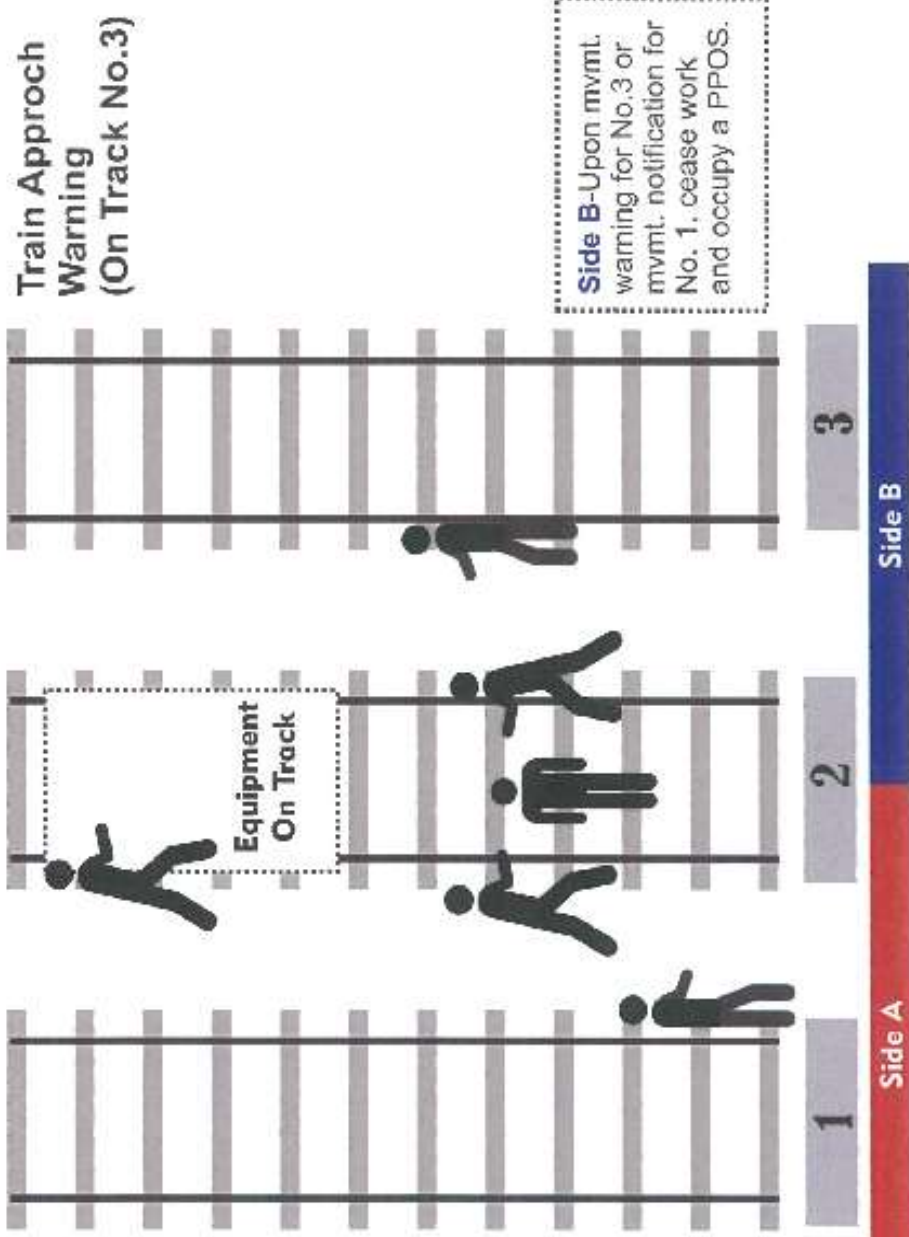
Side A-Upon receiving a notification or warning for movement(s) ("mvmt. notification or warning) on No.1, cease work and occupy a predetermined place of safety ("PPOS").

Side B-Work is not req'd. to cease during mvmt(s), on No.1

Occupied Track-Upon mvmt. notification or warning for No.1, cease work and occupy a PPOS, except that work may continue during mvmt(s). on No.1 auth'd. at 25 MPH (40 MPH passenger) or less if maintain 25' spacing.

5.4.3

**Working limits
(On Track No.1)**



Side A-Upon mvmt. notification for NO.1 cease work and occupy a PPOS. Work is not req'd to cease during mvmt(s). on No.3

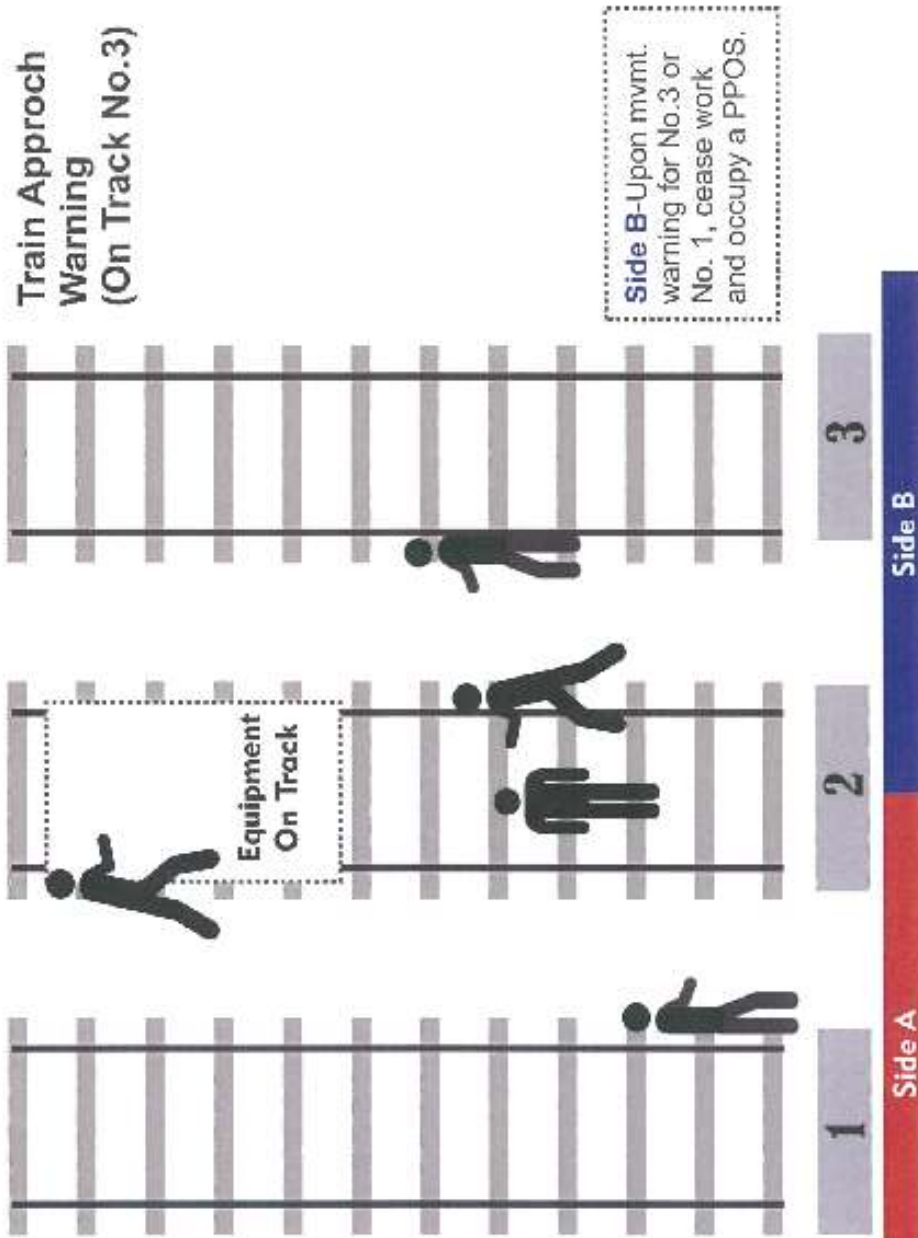
Side B-Upon mvmt. warning for No.3 or mvmt. notification for No. 1, cease work and occupy a PPOS.

Occupied Track-Upon mvmt. notification for No.1 or movement warning for No.3, cease work and occupy a PPOS, except that work may continue during mvmt(s). on No.1 or No.3 auth'd. at 25 MPH (40 MPH passenger) or less if maintain 25' spacing.

5.4.4

Train Approach Warning (On Track No.1)

Train Approach Warning (On Track No.3)



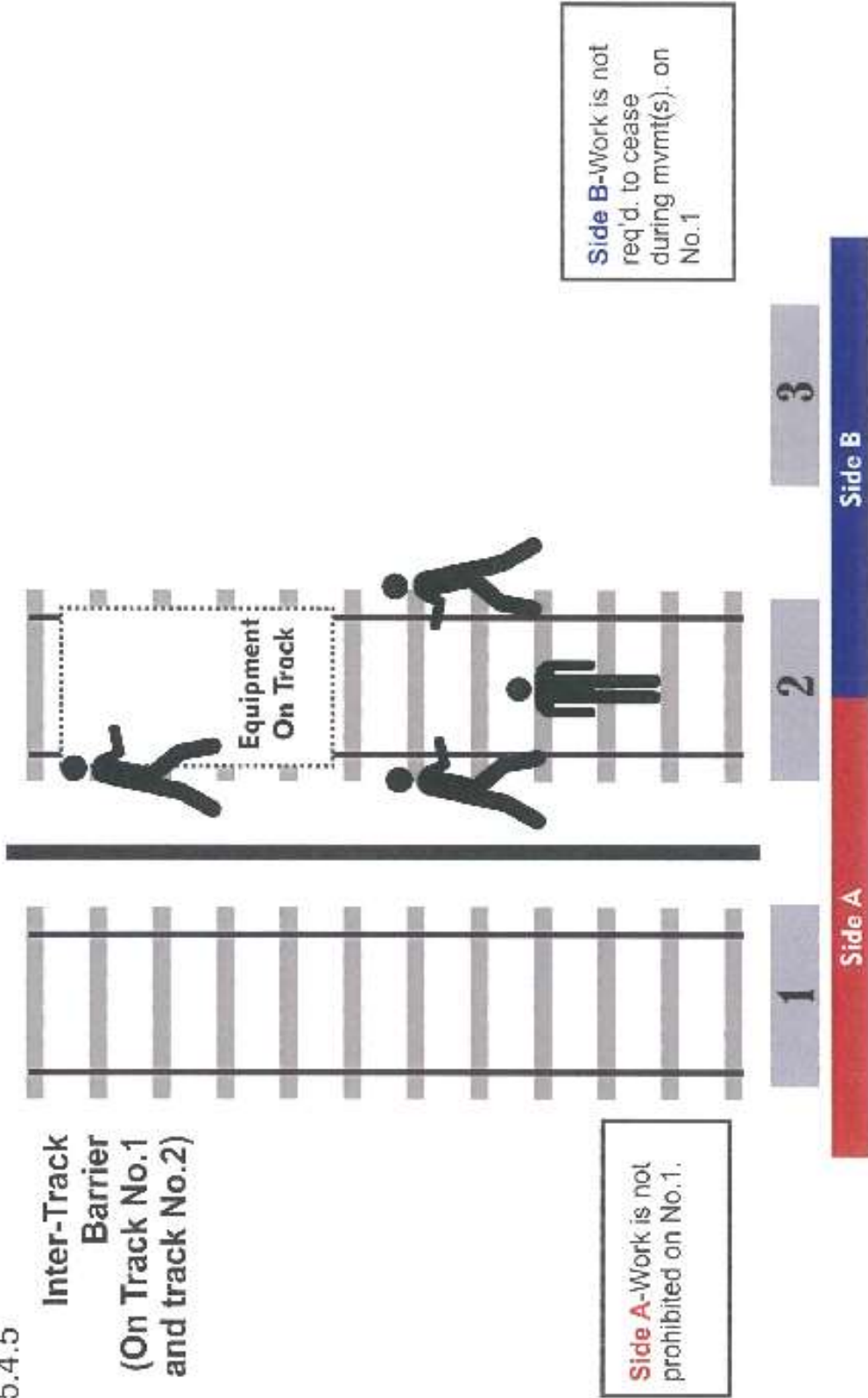
Side A-Upon mvmt. notification for No.1 cease work and occupy a PPOS.

Side B-Upon mvmt. warning for No.3 or No. 1, cease work and occupy a PPOS.

Occupied Track-Upon warning for No.1 or No.3, cease work and occupy a PPOS, except that work may continue during mvmt(s). on No.1 or No.3 auth'd. at 25 MPH (40 MPH passenger) or less if maintain 25' spacing.

5.4.5

**Inter-Track
Barrier
(On Track No.1
and track No.2)**



Side A-Work is not prohibited on No.1.

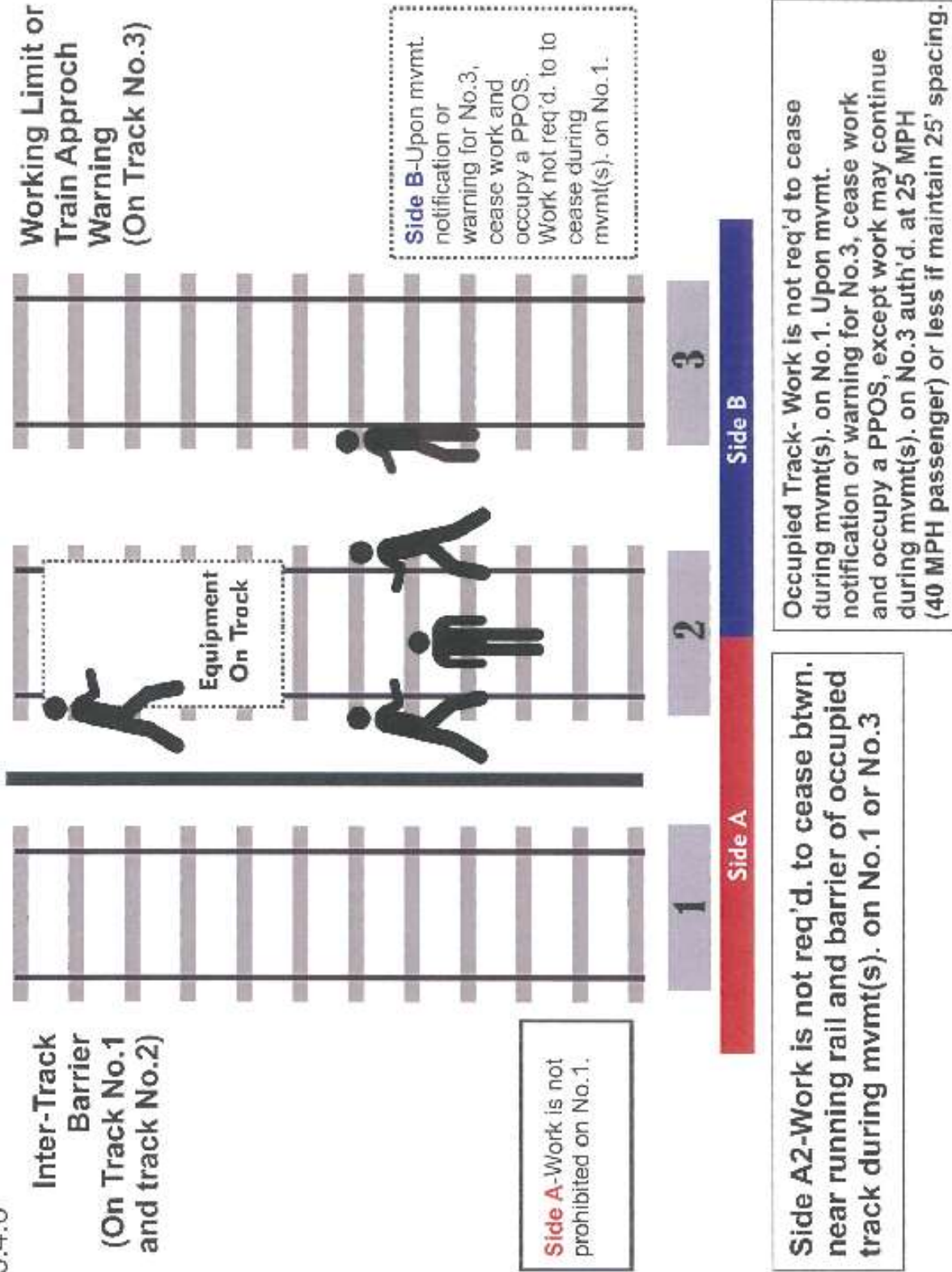
Side B-Work is not req'd. to cease during mvmt(s). on No.1

Side A2-Work is not req'd. to cease btwn. near running rail and barrier of occupied track during mvmt(s). on No.1 or No.3

Occupied Track- Work is not req'd to cease during mvmt(s). on No.1 or No.3

5.4.6

**Inter-Track Barrier
(On Track No.1 and track No.2)**



Working Limit or Train Approach Warning (On Track No.3)

Side B-Upon mvmt. notification or warning for No.3, cease work and occupy a PPOS. Work not req'd. to to cease during mvmt(s). on No. 1.

Side A-Work is not prohibited on No.1.

Side A2-Work is not req'd. to cease btwn. near running rail and barrier of occupied track during mvmt(s). on No.1 or No.3

Occupied Track- Work is not req'd to cease during mvmt(s). on No.1. Upon mvmt. notification or warning for No.3, cease work and occupy a PPOS, except work may continue during mvmt(s). on No.3 auth'd. at 25 MPH (40 MPH passenger) or less if maintain 25' spacing.

6. AUDIBLE WARNING FROM TRAINS

All trains shall sound an audible warning (GCOR rule 5.8.2 sequence 8 for FrontRunner and Rule 11.12 for TRAX) when approaching roadway workers on or about the track, station, or platform, regardless of any local whistle/horn prohibitions. After the initial warning, audible warnings will be issued intermittently until the head end of the train has passed the men or equipment. Such audible warning shall not substitute for on-track safety procedures of UTA's RWP Program.

In order to give trains advance notice of roadway workers on or about a track, each roadway worker fouling the track shall wear approved fluorescent, reflective, high visibility (orange) work wear. Roadway workers on platforms or stations will abide by UTA SOP OSH 4.22 and Chapter 10 of this program.

7. RIGHT TO CHALLENGE ON-TRACK SAFETY

Each roadway worker shares responsibility for ensuring that on-track safety is provided and complies with this Program. Challenges to on-track safety are also referred to as Good-Faith Challenges. See CFR 214.503.

7.1 RESPONSIBILITIES OF UTA

UTA shall:

- 1) Provide proper training of roadway workers as outlined in [Section 2 Training](#).
- 2) Guarantee each worker the absolute right to challenge, in good faith, whether the on-track safety procedures comply with the UTA RWP Program. The roadway worker shall have the right to remain clear of the track until the challenge is resolved according to the procedures established in this Program.
- 3) Follow the procedures as outlined in this chapter.

7.2 RESPONSIBILITIES OF THE ROADWAY WORKER

Each roadway worker shall:

- 1) Strictly adhere to the provisions of this Program.
- 2) Not foul a track except when necessary in the performance of the roadway worker's duties.
- 3) Ascertain that procedures ensuring on-track safety are provided before fouling a track.
- 4) Refuse any directive that violate an on-track safety rule and promptly notify the assigned RWIC when proposed on-track safety provisions do not comply with this program.

Furthermore, each tier of roadway worker will have more responsibilities based upon their level of training and their assigned duties. These duties and responsibilities are clearly defined in [Section 2 Training](#).

7.3 RESOLVING CHALLENGES TO THE UTA RWP PROGRAM

Challenges made in good faith to the UTA RWP Program will be resolved in the following manner:

- 1) The roadway worker will inform the RWIC that the worker does not believe that protection afforded to the roadway worker complies with the UTA RWP Program. The roadway worker shall specify the alleged non-compliance. The roadway worker will not be subject to any retribution or punishment for making a good faith challenge.
- 2) The RWIC will review the UTA RWP Program with the roadway worker to verify whether or not the Program has been followed. If the Program has been followed, the RWIC shall notify the roadway worker. If the Program has not been followed, the correct measures shall immediately be implemented.
- 3) If the roadway worker making the challenge is still not satisfied that the on-track safety steps implemented comply with UTA RWP Program, the next level supervision will be contacted⁹. The supervisor will review the on-track safety procedures that were implemented by the RWIC and make a determination whether or not the UTA RWP Program is being applied properly.

⁹ A Safety Administrator can also be used as an escalation option.

- 4) If the next level supervisor determines that the Program is not being followed, next level supervisor will direct the RWIC to implement the on-track Program to ensure proper protection of roadway workers in accordance with the Program.
- 5) If the next level supervisor determines that the Program is being properly applied, the challenging roadway worker will be directed to perform the roadway worker's assigned duty. If the roadway worker still refuses to perform the assigned duty, discipline, including termination, may be applied.
- 6) Written documentation of all challenges made to the next level supervisor will be recorded and reviewed by UTA.
- 7) Recommendations for changes in the UTA RWP Program resulting from these reviews will be forwarded to UTA, attention of "RWP Program Manager" for consideration.

8. ROADWAY MAINTENANCE MACHINES

8.1 PURPOSE AND SCOPE

The purpose of this section is to prevent accidents and casualties caused by the lawful operation of on-track maintenance machines and hi-rail vehicles.

RMM manufactured on or after 1 January 1991 but prior to 28 March 2005 are referred to in the regulation as “existing” and must meet specific retrofit requirements as per 49 CFR 214.

On-track safety for roadway workers who operate or work near roadway maintenance machines shall comply with all applicable instructions and warnings pertaining to their specific equipment including the following provisions:

- a. Getting on and off or riding track machines
- b. Inspections
- c. Safe passage
- d. Operation of brakes
- e. Maximum speeds
- f. Other speed requirements
- g. Grade crossings
- h. Following cars of trains or machines
- i. Signaling stops
- j. Passing trains or machines
- k. Operating over switches or derails
- l. Hi-rail vehicles
- m. Communication requirements with workers in the vicinity of RMM. All RMM work crews will communicate through assigned radios on applicable channels (refer to SOP 401.1)
- n. [Maintaining a safe distance of ten feet from the OCS power cables when working with machinery on TRAX corridors](#)
- o. All rules are mandatory for controlled and non-controlled track

Note: If a machine must enter within ten feet of, or has the potential to contact the OCS power lines, appropriate requests for a power outage, grounding, and red tag procedures will be followed. A 24-hour advance notice must be made prior to electrical power being shut off and or grounded. Refer to section [4.11 Overhead Catenary Electrical Hazards](#) for further guidance.

Operators and roadway workers shall be observant and be aware of work groups that may be working on adjacent tracks. Refer to section [5 ADJACENT CONTROLLED TRACK PROCEDURES](#) for further guidance.

Per notification requirements (49 CFR Part 674) all on-track maintenance machines/hi-rail vehicle derailments (excluding those related to putting on or putting off at grade crossings) shall be reported to either the TRAX Control Center or FR Control and also to the Transit Communication Center (TCC). The TCC will send this information out as an Emergency Notification Text for appropriate UTA internal response.

8.2 SAFE OPERATION OF RMM

UTA's FrontRunner, TRAX, and Sugarhouse Streetcar and future extensions are operated as controlled track (see definition [1.2 Definitions](#)). As such, all RMM must contact the appropriate operating control center and receive authorization from control prior to entering the rail corridor and or hi-rail work. Supervisors/workers will prepare the appropriate work permits which will describe the type of work, duration of work and location. [Section 7, Right to Challenge On-Track Safety](#), applies equally to RMM and RMM Operators.

8.3 ENVIRONMENTAL CONTROLS AND PROTECTION SYSTEMS FOR NEW RMM

- 1) The following new on-track roadway maintenance machines shall be equipped with enclosed cabs with operative heating systems, operative air conditioning systems, and operative pressurized ventilation systems:
 - a. Ballast regulators
 - b. Tampers
 - c. Mechanical brooms
 - d. Rotary scarifiers
 - e. Under-cutters
 - f. Functional equivalents of any of the machines identified in this list
- 2) New on-track roadway maintenance machines, and existing roadway maintenance machines specifically designed by UTA, of the types identified in paragraph (1) above, or functionally equivalent there to, shall be capable of protecting employees in the cabs of the machines from exposure to air contaminants, in accordance with 29 CFR 1910.1000.
- 3) UTA Maintenance of Way will maintain a list of new and designated existing on-track roadway maintenance machines of the types identified in paragraph (1) above, or functionally equivalent thereto. The list shall be kept current and made available to the Federal Railroad Administration and other federal and state agencies upon request.
- 4) An existing roadway maintenance machine of the type identified in paragraph (1) above, or functionally equivalent thereto, becomes "designated" when UTA adds the machine to the list required in paragraph (3) in this section. The designation becomes irrevocable, and the designated existing roadway maintenance machine remains subject to paragraph (2) of this section until it is retired or sold.
- 5) If the ventilation system on the new on-track roadway maintenance machine or a designated existing on-track roadway maintenance machine or a designated existing on-track roadway maintenance machine of the types identified in paragraph (1) above, or functionally equivalent thereto, becomes incapable of protecting an employee in the cab of the machine from exposure to air contaminant in accordance with 29 CFR 1910.1000, personal respiratory protective equipment provided for each such employee until the machine is repaired in accordance with 49 CFR 214.531.

- 6) Employees using personal respirators will have a medical clearance, annual fit test, and annual training on the proper use of said respirator in accordance with 29 CFR 1910.
- 7) New roadway maintenance machines with enclosed cabs shall be equipped with operative heating and ventilation systems.
- 8) When new roadway maintenance machines require operation from non-enclosed stations outside the main cab, the non-enclosed stations shall be equipped, where feasible from an engineering perspective, with a permanent or temporary roof, canopy, or umbrella designated to provide cover from normal rainfall and midday sun.

8.4 SAFETY EQUIPMENT FOR NEW ON-TRACK RMM

- 1) Each roadway maintenance machine shall be equipped with:
 - a. A seat for each operator, except as provided in paragraph (2) of this section.
 - b. A safe and secure position with handholds, handrails, or a secure seat for each roadway worker transported on the machine. Each position shall be protected from moving parts of the machine.
 - c. A positive method of securement for turntables, on machines equipped with a turntable, through engagement of pins and hooks that block the descent of turntable devices below the rail head when not in use.
 - d. A windshield with safety glass, or other material with similar properties, if the machine is designed with a windshield. Each new on-track roadway maintenance machine designed with a windshield shall also have power windshield wipers. Or suitable alternatives that provide the machine operator and equivalent level of vision if windshield wipers are incompatible with the windshield material.
 - e. A machine braking system capable of effectively controlling the movement of the machine under normal operating conditions.
 - f. A first-aid kit that is readily accessible and complies with 29 CFR 1926.50(d)(2). This is not applicable to generators, light sets, air compressors, or similarly towed or carried equipment. However, the vehicle moving the equipment shall have a first-aid kit.
 - g. An operative and properly charged fire extinguisher of 5 BC rating or higher which is securely mounted and readily accessible to the operator from the operator's workstation.
- 2) Each new on-track roadway maintenance machine designed to be operated and transported by the operator in a standing position shall be equipped with handholds and handrails to provide the operator with a safe and secure position.
- 3) Each new on-track roadway maintenance machine that weighs more than 32,500 pounds light weight and is operated in excess of 20 MPH shall be equipped with speed indicator that is accurate within +/- 5 MPH of the actual speed at speeds of 10 MPH and above.
- 4) Each new on-track roadway maintenance machine shall have its as-built light weight displayed in a conspicuous location on the machine.

8.5 VISUAL ILLUMINATION AND REFLECTIVE DEVICES FOR ON-TRACK RMM

Each new on-track roadway maintenance machine shall be equipped with the following visual illumination and reflective devices:

- 1) An illumination device, such as headlight, capable of illumination obstructions on the track ahead in the direction of travel for a distance of 300 feet under normal weather and atmospheric condition.
- 2) Work lights, if the machine is operated during the period between one half-hour before sunrise or in dark areas such as tunnels, unless equivalent lighting is otherwise provided.
- 3) An operative 360-degree intermittent warning light or beacon mounted on the roof of the machine. New roadway maintenance machines that are not equipped with fixed roofs and have a light weight less than 17,500 pounds are exempt from this requirement.
- 4) A brake light activated by the application of the machine braking system and designed to be visible for a distance of 300 feet under normal weather and atmospheric conditions.
- 5) Rearward viewing devices, such as rearview mirrors.

8.6 AUDIBLE WARNING DEVICES FOR ON-TRACK RMM

Each new on-track roadway maintenance machine shall be equipped with both:

- 1) A horn or other audible warning device that produces a sound loud enough to be heard by roadway workers and other machine operators within the immediate work area. The triggering mechanism for the device shall be clearly identifiable and within easy reach of the machine operator.
- 2) An automatic change-of-direction which provides an audible signal that is at least three seconds long and is distinguishable from the surrounding noise, change of direction alarms may be interrupted by the machine operator when operating the machine in the work mode if the function of the machine would result in a constant, or almost constant, sounding of the device. In any actions brought by FRA to enforce the change of direction alarm requirement in a particular work function would a constant, or almost constant, sounding of the device.

8.7 RETROFITTING OF EXISTING ON-TRACK RMM

Each existing on-track roadway maintenance machine shall have a safe and secure position with handholds, handrails or a secure position for each roadway worker transported on the machine. Each position shall be protected from moving parts of the machine.

By March 28, 2005, each existing on-track roadway maintenance machine shall be equipped with a permanent or portable horn or other audible warning device that produces a sound loud enough to be heard by roadway workers and other machine operators within the immediate working limits. The triggering mechanism for the device shall be clearly identifiable and within easy reach of the machine operator.

By March 28, 2005, each existing on-track roadway maintenance machine shall be equipped with a permanent illumination device or a portable light that is securely placed and not handheld. The illumination device or portable light shall be capable of illuminating obstructions on the track ahead for a distance of 300 feet under normal weather and atmospheric conditions when the machine is operated during the period between one-half hour after sunset and one-half hour before sunrise or dark areas such as tunnels.

8.8 OVERHEAD COVERS FOR EXISTING ON-TRACK RMM

For those existing on-track roadway maintenance machines either currently or previously equipped with overhead covers for the RMM operator's position, defective covers shall be repaired, or missing covers shall be installed, by March 28, 2005 and thereafter maintained in accordance with the provisions of 214.531.

For those existing on-track roadway maintenance machines that are not already equipped with overhead covers for the operator's position, UTA shall evaluate the feasibility of providing an overhead cover on such a machine if requested in writing by the operator assigned to operate the machine or by the RMM operator's designated representative. UTA shall provide the RMM operator a written response to each request within 60 days. If UTA finds the addition of an overhead cover is not feasible, the response shall include an explanation of the reasoning used by UTA to reach that conclusion.

For purposes of this section, overhead covers shall provide the RMM operator's position with cover from normal rainfall and midday sun.

8.9 RETROFITTING OF EXISTING ON-TRACK RMM (MANUFACTURED ON OR AFTER JANUARY 1, 1991)

In addition to meeting the requirements of 49 CFR 214.513, after March 28, 2005 each existing on-track roadway maintenance machine manufactured on or after January 1, 1991, shall have the following:

- 1) A change-of-direction alarm or rearview mirror or other rearward viewing device if either device is feasible, given the machine's design, and if either device adds operational safety value, or both, given the machine's design or work function.
- 2) An operative heater, when the machine is operated at an ambient temperature less than 50 degrees Fahrenheit and is equipped with, or has been equipped with, a heater installed by the manufacturer or the railroad.
- 3) The light weight of the machine stenciled or otherwise clearly displayed on the machine if the light weight is known.
- 4) Reflective material, or a reflective device, or operable brake lights.
- 5) Safety glass when its glass is normally replaced, except that replacement glass that is specifically intended for on-track roadway maintenance machines and is in the UTA inventory as of September 26, 2003 may be utilized until exhausted.
- 6) A turntable restraint device, on machine equipped with a turntable, to prevent undesired lowering, or a warning light indicating that the turntable is not in the normal travel position.

8.10 SAFE AND SECURE POSITIONS FOR RIDERS

On or after March 1, 2004 a roadway worker, other than the machine operator, is prohibited from riding on any on-track roadway maintenance machine unless a safe and secure position for each roadway worker on the machine is clearly identified by stenciling, marking, or other written notice.

8.11 FLOORS, DECKS, STAIRS, AND LADDERS OF ON-TRACK RMM

Floors, decks, stairs, and ladders of on-track roadway maintenance machines shall be of appropriate design and maintained to provide secure access and footing, and shall be free of oil, grease, or any obstruction which creates a slipping, falling, or fire hazard.

8.12 WORK ZONES AROUND ROADWAY MAINTENANCE MACHINE

Roadway workers shall not enter a roadway maintenance machine's work zone without first communicating with the operator of the equipment to establish safe work procedures. This process involves the roadway worker making eye contact with the operator, if no eye contact is made, no roadway worker will approach the RMM. The RMM operator then removes his hands from the controls of the RMM and signals the roadway worker to enter the work zone. Operation of the RMM cannot continue until the Roadway Worker has cleared the work zone. Eye contact must be established, and a pre-determined hand movement will be made by the Roadway Worker signaling that they are clear from the work zone indicating it's safe for the RMM Operator to proceed.

Unless a different work zone is established and documented in the job briefing process, the work zone extends from a point 15 feet in front of the machine to a point 15 feet behind the machine and covers a 360-degree radius around the vehicle. Some types of roadway maintenance machines, such as cranes and ballast regulators, also require lateral or side clearance to ensure the safety of all roadway workers. Certain types of off-track RMM also require a 360-degree radius of 15 feet. This will be specified in the job briefing.

RMM operators shall ensure that backup alarms are sounding before making a reverse move. Operators of roadway maintenance machines not equipped with backup alarms shall sound their horn three short blasts for reverse movements and two short blasts for forward movement. This requirement, however, does not relieve the operators from ensuring the way is clear before making any move. Equipment without a backup alarm or horn cannot be used.

All above information must be detailed in the job briefing including hand signaling, communication, RMM movements and eye contact procedures before any work can be conducted with in the right of way.

8.13 FLAGGING EQUIPMENT FOR ON-TRACK RMM AND HI-RAIL VEHICLES

Flagging equipment for on-track roadway maintenance machines and hi-rail vehicles shall have on board a flagging kit that complies with the operating rules of the railroad if:

- 1) The equipment is operated over track subject to railroad operating rule requiring flagging; and
 - a. the equipment is not part of a roadway work group; or
 - b. The equipment is the lead or trailing piece of equipment in a roadway work group operating under the same occupancy authority.

The Rail Service roadway maintenance machine flagging kit consists of:

- 1) Red flags (2 each approximately 18" x18")
- 2) Red lens flashlight (2 each for night flagging)

8.14 SAFE WORKING SPEED AND DISTANCE BETWEEN RMM

Unless a different distance is specified and documented in the job briefing, the minimum distance between roadway maintenance machines while working shall be 50 feet.

Maximum working speeds are entirely dependent upon the task at hand.

8.15 SAFE TRAVELING SPEED AND DISTANCE BETWEEN RMM

Roadway maintenance machines shall keep at least 200 feet apart while traveling. The only exception to this requirement is when machines need to “bunch” up to move over highway grade crossings. When “bunching up”, operators shall keep at least 50 feet between machines. The RMM operator shall comply with safe operating rules for “signal to stop” when slowing down or stopping. When operating roadway maintenance machines during inclement weather conditions, (snow, fog, dust etc.), machine operators will use caution and operate at speeds to allow the operator sufficient stopping distance between machines based upon visibility conditions.

Maximum travelling speed is 35 mph, but circumstances such as those listed above (weather conditions, bunching, approaching a grade crossing) may require reduced speeds. Maximum speed is 5mph when travelling over a switch.

8.16 TYING-UP RMM

In addition to meeting other requirements, each roadway maintenance machine or other piece of equipment which may require tie-up or securing, shall follow these procedures to ensure safety:

- 1) After all brakes, booms, locks, and hooks have been secured, the operator shall dismount the machine on the field side of the track away from live traffic. If the track is located between live tracks, the operator shall dismount on the side designated in the job briefing.
- 2) The operator shall stand beside the machine and direct the next roadway machine to a stop.
- 3) The operator shall not go between roadway maintenance machines until all machines have come to a stop or the RWIC has given permission.
- 4) The operator shall communicate the location and tie-down method used to Control once the tie down is completed.

8.17 HI-RAIL VEHICLES

- 1) The hi-rail gear of all hi-rail vehicles shall be inspected annually, with no more than 14 months between inspections. Tram, wheel wear, and gage shall be measured and, if necessary, adjusted to allow the vehicle to be safely operated.

Example:

If a vehicle is bought/delivered on March 1st, it will be inspected every following March 1st. If a subsequent inspection does not occur until March 15th, it is within the 14-month limit and acceptable. However, the following inspection will be scheduled to occur on March 1st.

- 2) UTA shall keep records pertaining to compliance with paragraph 1 of this section. Records may be kept on forms provided by UTA or by electronic means. UTA shall retain the record of each inspection until the next required inspection is performed. The records shall be made available for inspection and copying during normal business hours by representative of the FRA. The records may be kept on hi-rail vehicle or at a location designated by UTA.
- 3) A new hi-rail vehicle shall be equipped with:
 - a. An automatic change-of-direction alarm or back-up alarm that provides an audible signal at least three seconds long and distinguishable from the surrounding noise; and
 - b. An operable 360-degree intermittent warning light or beacon mounted on the outside of the vehicle.
- 4) The operator of a hi-rail vehicle shall check the vehicle for compliance with this subpart, prior to using the vehicle at the start of the operator's work shift. A non-complying condition that cannot be repaired immediately shall be tagged and dated in a manner prescribed by UTA and reported to the designated official.
- 5) Operators of hi-rail vehicles shall comply with all hi-rail operating rules and all on-track safety procedures while driving on the rail. If grade crossing signals are out of service, operators of hi-rail vehicles shall come to a complete stop and only proceed when all motor vehicle traffic has come to a complete stop in both directions prior to entering the intersection.
- 6) Regardless of the proper operation of grade crossing warning devices, RMM operators must be prepared to stop for motorists. Do not rely upon the grade crossing warning devices.
- 7) Each retrofitted RMM with a boom, hoist, or lift intended for human occupancy must be recertified to updated operating specifications and tolerances before operation on track.
- 8) Manuals and inspections must be stored within the RMM

8.18 TOWING WITH ON-TRACK RMM OR HI-RAIL VEHICLES

- 1) When used to tow push cars or other maintenance machine or hi-rail vehicle shall be equipped with a towing bar or other coupling device that provides a safe and secure attachment.
- 2) An on-track roadway maintenance machine or hi-rail vehicle shall not be used to tow push-cars or other maintenance-of-way equipment if the towing would cause the machine or hi-rail vehicle to exceed the capabilities of its braking system. In determining the limit of the braking system, UTA must consider the track grade (slope), as well as the number and weight of push-cars or other equipment to be towed.

8.19 ON-TRACK RMM; INSPECTION FOR COMPLIANCE AND SCHEDULE FOR REPAIRS

- 1) The operator of an on-track roadway maintenance machine shall check the machine components for compliance with this subpart, prior to using the machine at the start of the operator's work shift.
- 2) Any non-complying condition that cannot be repaired immediately shall be tagged and dated in a manner prescribed by UTA and reported to the designated official.
- 3) The operation of an on-track roadway maintenance machine with a non-complying condition shall be governed by the following requirements:

- a. An on-track roadway maintenance machine with headlights or work lights that are not in compliance may be operated for a period not exceeding seven calendar days.
- b. A portable horn may be substituted for a non-complying or missing horn for a period not exceeding seven calendar days.
- c. A fire extinguisher readily available for use may temporarily replace a missing, defective, or discharged fire extinguisher on a new on-track roadway maintenance for a period not exceeding seven calendar days, pending the permanent replacement or repair of the missing, defective, or used fire extinguisher.
- d. Non-complying automatic change-of-direction alarms, backup alarms, and 360-degree intermittent warning lights or beacons shall be repaired or replaced as soon as practicable within seven calendar days.
- e. A structurally defective or missing operator's seat shall be replaced or repaired within 24 hours or by start of the machine's next tour of duty. The machine may be operated for the remainder of the operator's tour of duty if the defective or missing operator's seat does not prevent its safe operation.

8.20 IN-SERVICE FAILURE OF PRIMARY BRAKING SYSTEM

- 1) In the event of a total in-service failure of its primary braking system, an on-track roadway maintenance machine may be operated for the remainder of its tour of duty with the secondary braking system or by coupling to another machine, if such operations may be done safely.
- 2) If the total in-service failure of an on-track roadway maintenance machine's primary braking system occurs where other equipment is not available for coupling, the machine may, if it is safe to do so, travel to a clearance or repair point where it shall be placed out-of-service until repaired.

8.21 RMM DERAILMENT

In the event that the RMM wheel(s) or part of the wheel(s) comes off rail it is set on bring the RMM to a stop as safe as possible. Contact the appropriate Control Center immediately with location, direction, and any injury or damages. Control will then send out a Derailment Notice by email providing information on who was involved, location of the derailment, and any injury or damage reported.

9. OVERSIGHT AND COMPLIANCE

9.1 UTA RWP SPOT CHECK PROGRAM

The UTA RWP Spot Check Program is intended to ensure that the RWP program is an effective safeguard for both UTA employees and external groups working within our right of way.

This program aims to provide the following benefits:

- Create transparency across all UTA departments
- Identify dangerous situations and habits before an accident or incident occurs
- Improve policies and training to meet practical needs
- Improve safety accountability
- Satisfy FRA regulatory requirements

9.1.1 SPOT CHECK REQUIREMENTS

Periodic oversight for UTA roadway workers is accomplished via the following standards. Periodic oversight is performed on a per-individual basis for employees within MOW, and on a per-team basis for business units outside of MOW:

- a) Receive an evaluation through the UTA Spot Check Program at least once per six-month period.
 - a. There are two six-month periods each year: January through June, and July through December.
 - b. This spot check must be performed by an authorized examiner using the current version of the online RWP Spot Check form.
 - c. Spot checks may not be performed by the RWIC overseeing the workgroup being checked.

Individual departments or teams may perform additional checks or evaluations beyond what is listed in this section. In areas where 49 CFR 217 requirements apply, spot checks are conducted as part of the broader requirements lists in CFR 217 and 263. Each area subject to these regulations can include this spot check program by reference.

9.1.2 RWP SPOT CHECK PROGRAM KPIS

The following KPIS will be tracked as part of the RWP Spot Check Program and are based on data collected via the RWP Spot Check Form. Final responsibility for compiling these KPIS rests with the RWP Program Manager, who will then provide them to the relevant departments and business units. The RWP Program Manager will review and evaluate all KPI's. The relevant department heads and Business Unit Managers also have a responsibility to review the KPIS provided as it related to their areas, and to address obstacles and shortfalls in RWP Spot Check completion in relation to their reports.

All KPIs are to be tracked in the following dimensions, with subgroups being rolled up to each level above them.

- Organizational
 - Company-Wide
 - Business Unit
 - Department
- Time-Based
 - 5-year history, by half-year
 - 2-year history, by month and half year
 - Current six-month period
 - Current month

Trigger thresholds are considered within the context of the current six-month period and apply to all organizational levels except where otherwise noted. KPI responses listed in this section are performed in addition to the mitigations outlined in the procedures governing spot check failures. Spot Check failure mitigations should be determined and carried out independent of KPI responses.

9.1.2.1 List of KPIs

KPI	Trigger(s) for Response	Response Plan	Decision/Corrective Action
<p>Total number of Spot Checks conducted (Count over time)</p>	<ul style="list-style-type: none"> • Month 3: < 50% complete • Month 6: < 90% complete 	<p>First occurrence: Notification of trigger by email to dept. head</p> <p>Additional consecutive occurrences: Notification of trigger by email to dept. head and their immediate superior</p>	<p>Notified individuals will acknowledge notice and provide and implement a corrective action plan to address root causes</p>
<p>Overall Spot Check Failures (Percentage of total)</p>	<ul style="list-style-type: none"> • Any single failure that resulted in a shutdown • > 10% failure rate of any type 	<p>Meeting of the following to review trigger and identify root causes</p> <ul style="list-style-type: none"> • RWP Program Manager • Spot Check Inspectors • Leadership for Affected Area(s) (Supervisor, Dept. Head, and/or BU Manager) 	<p>Review team will create a corrective action plan based on the results of the review</p>

KPI	Trigger(s) for Response	Response Plan	Decision/Corrective Action
<p>Failures to follow track access procedure (Percentage of total)</p>	<ul style="list-style-type: none"> • 2 or more failures within a single department • > 5% failure rate for BU or company 	<p>Notification by email to Department Head or BU Managers, as applicable</p>	<p>RWP Program manager and notified individuals will create and implement a corrective action plan to address root causes</p>
<p>Type of work being performed vs time of day (Distribution map)</p>	<p>Reviewed yearly</p>	<p>Evaluate RWP program and its elements for possible improvements, based on KPI information</p>	<p>Updates to policy or corrective action plans, if any</p>
	<p>Review semi-yearly for the following:</p> <ul style="list-style-type: none"> • Clustering by time of day • Clustering within 6-month period • Clustering by shifts • Other anomalies in distribution 	<p>RWP Program Manager will identify potential concerns, then meet with Leadership for Affected Area(s) (Dept. Head and/or BU Manager)</p>	<p>Meeting attendees will create and implement a corrective action plan to address root causes</p>
<p>Failures to follow or establish On-Track Safety (Percentage of total and count)</p>	<p>> 15% within BU or company-wide, measured across two consecutive six-month periods</p>	<p>RWP Steering Committee will meet to review root causes</p>	<p>RWP Steering Committee will create and implement a corrective action plan to address root causes</p>
	<p>2 or more failures within a single department</p>	<p>RWP Program Manager or approved delegate will provide coaching for the affected department</p>	<p>RWP Program Manager will identify the correct topic(s) for coaching</p>

KPI	Trigger(s) for Response	Response Plan	Decision/Corrective Action
<p>Failures to provide proof of proper RWP certification (Percentage of total and count)</p>	<p>< 5% failure rate</p>	<p>A meeting will: RWP PM, Dept. Head, BU Head Meeting of the following to review trigger and identify root causes</p> <ul style="list-style-type: none"> • RWP Program Manager • Spot Check Inspectors • Dept. Head and BU Manager 	<p>Meeting attendees will create and implement a corrective action plan to address root causes</p>

9.2 GUIDELINES FOR MITIGATION ACTIONS

In the interest of maintaining a safe work environment, it is imperative that all personnel with oversight responsibilities watch for and respond to instances of non-compliance or hazardous conditions. **Individuals with oversight responsibilities include, but are not limited to:**

- a) Managers/Supervisors
- b) Roadway Workers in Charge
- c) **Controllers/Dispatchers**
- d) Safety Department personnel
- e) Track Access Coordinators

Individuals within these roles are expected to exercise their authority effectively to implement hazard mitigations. This entails taking proactive measures to rectify non-compliance or hazardous situations, thereby preventing potential harm to personnel, property, and the environment. Such actions may involve enforcing safety protocols, initiating corrective measures, or seeking assistance from relevant stakeholders as necessary.

This section outlines some common types of hazard mitigation, and guidelines for when it is appropriate to enact them. **Oversight personnel may also choose to use mitigations not listed in this section at their discretion.** Instances where oversight personnel suspect the possibility of an employee being under the influence of drugs or alcohol should be referred to the employee’s supervisor to be handle by following established drug and alcohol compliance processes.

9.2.1 COMMUNICATION OF RWP HAZARD MITIGATIONS

Mitigations of any kind should be reported to the RWP Program Manager for documentation and tracking purposes. For minor mitigations, this can be reported by email after the mitigation has been completed.

For major mitigations, the RWP Program Manager should be contacted before enacting the mitigation by phone or text. If the RWP Program Manager is not available, contact a Safety Administrator.

- A. During normal business hours (8am-5pm, Mon-Fri): contact the relevant Safety Administrator (e.g. TRAX or FrontRunner)
- B. After business hours: Contact the Safety Administrator currently on call. The Safety Administrator after hours hotline is 801 287-7233.

If you are unable to reach either the RWP Program Manager or a Safety Administrator, contact the manager over the affected workgroup and follow their direction. Send a follow-up email to the RWP Program Manager documenting the situation and the resolution put in place by the manager.

All mitigations should be done in direct coordination and communication with the RWIC over the affected group.

9.2.2 MINOR MITIGATIONS

Minor mitigations are used in cases where the hazard or non-compliance meets all the following criteria:

- a) Is easily corrected at the time of discovery or shortly thereafter
- b) Is unlikely to cause serious injury or property damage
- c) Has not yet caused an injury of any kind

The recommended mitigations for these types of issues are as follows.

9.2.2.1 Individual Coaching and Workgroup Coaching

Individual coaching consists of the oversight personnel providing short, onsite training to correct non-compliant or hazardous behaviors of a single individual. Coaching should take place at the predetermined place of safety, or in a safe location outside the foul zone.

Coaching should be conducted in a respectful and supportive manner, without embarrassment to the employee so far as possible. Coaching done in this context should not be considered to be a disciplinary action. If disciplinary action is required, then it should be managed separately by the employee's supervisor or manager using existing employee management processes.

Once completed, the individual providing the coaching should document the coaching provided. This record should contain the following information at a minimum:

- a) A description of the non-compliant behavior or identified hazard
- b) A list or summary of the topics covered by the coaching
- c) The name, badge number, and signature of the coach
- d) The name, badge number, and signature of the employee being coached
- e) The name, badge number, and signature of the workgroup's RWIC
- f) The date, time, and location where coaching was provided

A copy of this record should be provided to the RWP Program manager.

9.2.2.2 Workgroup Coaching

Individual coaching consists of the oversight personnel providing short, onsite training to correct non-compliant or hazardous behaviors that involve multiple individuals in the workgroup. Like individual coaching, coaching should be delivered in respectful and supportive manner, and must be delivered in a safe location. Workgroup coaching should be given to the entire workgroup and be delivered in general terms, rather than singling out specific individuals.

Once completed, the individual providing the coaching should document the coaching provided. This record should contain the following information at a minimum:

- a) A description of the non-compliant behavior or identified hazard
- b) A list or summary of the topics covered by the coaching
- c) The name, badge number, and signature of the coach
- d) The name, badge number, and signature of each member of the workgroup
- e) The name, badge number, and signature of the workgroup's RWIC
- f) The date, time, and location where coaching was provided

A copy of this record should be provided to the RWP Program manager.

9.2.2.3 Worker Removed from Site

Removing an individual roadway worker from a worksite may be necessary in cases where the identified hazard or instance of non-compliance is limited to a single individual, but cannot be resolved through coaching or other immediate corrective actions. Examples of cases where removal may be warranted may include:

- a) Inappropriate attire
- b) Missing PPE or other necessary equipment
- c) Expired or missing proof of RWP qualification
- d) Physical, emotional, or intellectual impairment
- e) An unwillingness to accept coaching or to correct problematic behavior
- f) A need for training beyond what onsite coaching can effectively provide

When removing a worker from the worksite, oversight personnel shall notify the RWIC, and make all reasonable efforts to communicate with the affected employee's immediate supervisor. Oversight personnel should coordinate with the employee's supervisor to ensure that any necessary follow-up actions are clearly communicated, and to allow the supervisor to adjust the employee's assigned work as needed.

The oversight personnel requiring the removal should document the decision to remove the employee. This record should contain the following information at a minimum:

- a) A description of the non-compliant behavior or identified hazard
- b) The name, badge number, and signature of the oversight individual
- c) The name, badge number, and signature of the employee being removed
- d) The name, badge number, and signature of the workgroup's RWIC
- e) The necessary steps that must be completed before the individual may return to the site
- f) The date, time, and location where the removal took place

A copy of this record should be provided to the RWP Program manager and to the employee's immediate supervisor.

9.2.3 MAJOR MITIGATIONS

Major mitigations are enacted in response to significant instances of non-compliance, the discovery of a fundamental lack of understanding on safety requirements, or when major hazards are identified on site. Any hazard that meets at least one of the following criteria should be addressed with a major mitigation.

- a) Instances that could result in death or serious injury if left uncorrected
- b) Instances that could result in significant property damage
- c) Multiple workers are present who would individually qualify to be removed from the worksite
- d) Flagrant or excessive examples of non-compliance
- e) Demonstrated lack of understanding of fundamental RWP safety principles
- f) Lack of authorization to access the track or to be on UTA property

The major mitigations listed in this section are designed to isolate a hazardous situation and suspend operations until a more permanent solution can be determined and enacted. Major mitigations often involve remediation efforts beyond the immediate mitigation to ensure the situation is fully resolved before work continues. These follow up actions should be decided in collaboration with the RWP Program Manager and relevant UTA leadership after the initial mitigation is put in place by oversight personnel. A major mitigation is not considered complete until these follow-up actions are fully resolved.

Major Mitigations involving the RWIC

In addition to the scenarios outlined above, major mitigations are required in any situation in which the RWIC is found to be unable to effectively oversee on-track safety, or where a mitigation would prevent the RWIC from continuing to provide RWIC services.

Examples of instances where an RWIC would not be permitted to continue as RWIC may include:

- The RWIC does not have proof of non-expired RWIC qualifications
- The RWIC is physically, emotionally, or intellectually impaired
- The RWIC requires retraining beyond what can be provided by individual coaching
- The RWIC is unwilling to enact or support a necessary mitigation
- The RWIC is/was not present at the worksite when roadway workers were fouling the track
- The RWIC lacks a working UTA radio, proper PPE, or other necessary equipment

In most cases, removal of an RWIC can be resolved by enacting a short work stoppage while a replacement RWIC is selected. The RWIC's immediate supervisor should be notified in all cases involving the replacement of an RWIC to allow for work assignments to be adjusted.

9.2.3.1 Recommendation to Revoke Roadway Worker Qualification

An individual's RWP qualifications may need to be revoked in cases where the individual has demonstrated a fundamental lack of understanding regarding RWP processes and requirements, placing themselves or others at risk of injury. Because the invalidation of an individual's RWP qualification may impact their ability to perform

job duties, for both individuals both inside and outside of UTA, the revocation process requires the approval of multiple parties before taking effect.

9.2.3.1.1 UTA Employees

If an oversight representative determines that it is necessary to revoke the RWP qualification of a UTA employee, regardless of the level of RWP that individual currently holds, follow the steps listed below.

- A. Follow the steps for removing a worker from the worksite, as outlined in 9.2.2.3 Worker Removed from Site. If the RWIC is the individual in question, initiate a Work Stoppage for selecting a replacement RWIC instead.
- B. Collect and record the following information:
 - a. The employee's name and badge number.
 - b. The RWIC's name and contact information.
 - c. The name and contact information of the employee's supervisor.
 - d. The specific actions that took place which led to your recommendation.
- C. Contact the RWP Program Manager by phone and explain the circumstances leading to your recommendation, then provide the information you collected in step B.
- D. The RWP Program Manager will investigate and make recommendations, which will be shared with the employee's manager and supervisor. The employee's manager will make the final decision and the RWP Program Manager will document that decision.

9.2.3.1.2 Non-UTA Personnel

If an oversight representative determines that it is necessary to revoke the RWP qualification of a non-UTA Person, including but not limited to outside third-party contractors, sub-contractors, UTA employed contractors, regardless of the level of RWP that individual currently holds, follow the steps listed below.

- A. Follow the steps for removing a worker from the worksite, as outlined in 9.2.2.3 Worker Removed from Site. If the RWIC is the individual in question, initiate a Work Stoppage for selecting a replacement RWIC instead.
- B. Collect and record the following information:
 - a. The employee's name and badge number.
 - b. The RWIC's name and contact information.
 - c. The name and contact information of the employee's supervisor.
 - d. The specific actions that took place which led to your recommendation.
- C. Contact the RWP Program Manager by phone and explain the circumstances leading to your recommendation, then provide the information you collected in step B.
- D. The RWP Program Manager will investigate and make recommendations. The RWP Program Manager will inform any applicable Business Unit, Project Manager, Track Access Coordinator, and/or Property Administrator of the decision.

9.2.3.2 Work-Stop

A work-stop is a temporary suspension of the worksite, intended to remove roadway workers from a potentially hazardous situation until an effective mitigation can be put in place. A work-stop is an appropriate response for situations where a major mitigation is called for, but it is still possible for adequate mitigations to be enacted quickly enough to allow for work to continue later in the day.

Work-stops should be reported immediately to both the RWP program manager and the manager of the affected workgroup. In cases involving UTA-contracted external personnel, notification should be provided to the UTA manager whose service unit is responsible for coordinating with the contracted individuals. Cases involving third parties who are not contracted by UTA should be handled by the RWP Program Manager.

9.2.4 SITE SHUTDOWN

A site shutdown involves closing a worksite for the remainder of the workday or longer. Site shutdowns are used in cases where one or more significant hazards are identified that either cannot be resolved within a single day. This may be due to the time needed to implement the necessary mitigations, or because further investigation is needed to determine the appropriate course of action before any work can resume. A site shutdown is also the appropriate response to incidents resulting in serious injury or significant property damage.

A site shutdown has the same notification and reporting requirements as a work-stop (see [9.2.3.2 Work-Stop](#)).

10. PROGRAM DOCUMENTS

Roadway workers shall be given access to a copy of this UTA RWP Program manual during the training session. A copy of this program is also readily available in the UTA Rail Services safety administrator's office, the property management office, the safety department, or directly via download from the UTA website.

Roadway workers shall keep their roadway worker training qualification cards with them while working on UTA Rail Services ROW. This documentation shall be available for inspection by UTA, FRA, and UDOT during work. Training records of all roadway workers will be available to UTA, FRA, and UDOT upon request.

The "Red Book" is a pocket-sized book with regularly used UTA forms and common/required verbiage. The Red Book is created and maintained by the RWP Program Manager and reviewed by the RWP Steering Committee it is available, upon request, for any UTA employee to use.

10.1 RWP SAFETY DASHBOARD

The UTA Safety and Security Department shall maintain a means of reporting RWP training compliance and an overview of RWP-related incidents. This information must be accessible to UTA leaders who oversee RWP activities within their areas of authority. This reporting may be done by means of regular distribution of reports or via electronic dashboards or other equivalent methods.

10.2 STATEMENT OF ON-TRACK SAFETY

A statement of on-track safety is required to be filled out and kept with each Lone Worker who is providing ITD. The statement of on-track safety shall be completed BEFORE beginning work and will include the worker's name, date, company, working limits, and working time.

Roadway workers may obtain a copy of this form from the UTA Rail Services safety administrator's office or may photocopy it from this program.

Statement of On-Track Safety

A Lone Worker using individual train detection (ITD) must complete this form prior to fouling a track. Individual must keep completed form on his/her person until job completion.

Permit Holder _____ DATE: _____

Name of Company: _____

Working Limits	Time Entered Right-of-Way	Time Cleared Right-of-Way

Description of Work: _____

This form, or one very similar, must be in the employee’s possession while work is being performed.

Holder must wear high-visibility reflective (orange) safety vest and have a radio or cell phone to contact control.

Holder of this permit must contact control (TCC) for permission to access the right of way and call when clear of right-of-way.

Maximum Authorized Speed	Required Minimum Sight Distance
65 mph—(TRAX Light Rail)	1,430 FT.
79 mph —(FrontRunner Commuter Rail)	1,750 FT.

Workers must be clear of the track 15 seconds prior to train arrival. Depending upon the time required to clear, the sight distance may increase significantly.

10.3 WATCHMAN/LOOKOUT BRIEF

Roadway Worker In Charge: _____

Date: _____

JOB BRIEFING to include Special Conditions:

Type of on track safety used today:

Class of track _____ Authorized max. train speed _____

Times _____ to _____ Trk _____

Permit No. _____ Location _____ to _____

Times _____ to _____ Trk _____

Lookout Name _____

Other _____

Train Approach Signal _____

WORK ZONE _____ FT. _____

WORKING LIMITS: _____

GO TO THE FIELD SIDE OF # _____ TRACK WHEN CLEARING FOR TRAINS.

10.4 UTA ON-TRACK SAFETY MATRIX

UTA’s on-track safety matrix is developed to assist roadway workers in their evaluation of the type of on-track safety being provided at the working limits. On-track safety will be provided from the category of controlled track and non-controlled track for the freight spurs (see section [4 ON-TRACK SAFETY PROCEDURES](#)) from this matrix. The RWIC or the Lone Worker will determine which method of on-track safety will be used. After selecting the method, the RWIC will brief each work group and each Lone Worker and establish the working limits and time limits for the work group.

UTA On-Track Safety Matrix

Type Of Track	Type of Work Performed	Methods of Protection of Workers
Controlled	Planned program, out of face maintenance, or construction work	Use a UTA Rail Services work permit. Daily Operating bulletin/clearance to cover all tracks and adjacent tracks on which the work group is working.
Controlled	Unplanned work	<ul style="list-style-type: none"> • Train approach warning (TAW) • Exclusive track occupancy • Manual block around track being worked • Track flags • Track and Time • Foul time • Individual train detection (ITD) • Flag protection
Non-controlled	Planned or unplanned work	<ul style="list-style-type: none"> • Train approach warning (TAW) • Individual train detection (ITD) • Inaccessible track

UTA trains must sound the horn when approaching roadway workers on or near the track, regardless of local whistle prohibitions.

To give trains advance notice of roadway workers on or near the track, each roadway worker fouling the track must wear company approved high visibility orange/reflective apparel in accordance with Chapter 2 of this program.

10.5 TRACK ACCESS PERMITS

FrontRunner TRACK ACCESS PERMIT

*This permit is for territory controlled by FrontRunner Rail Control (FRC).
Submit permit requests by email to FRTrackaccess@rideuta.com*

PERMIT NUMBER
Assigned by FrontRunner

Permit is only valid for specified date and time.

For permits in territory controlled by TRAX visit www.rideuta.com/propertymanagement

Start Date/Time: _____

CONTRACTOR INFORMATION

Company Name: _____ **R.O.E.** _____

Applicant Name: _____

Phone: _____

Email: _____

Finish Date/Time: _____

Crew Size: _____

EXACT WORK LIMITS:

FROM: _____

TO: _____

OTHER: _____

ON SITE PERMIT HOLDER

Permit Holder Name: _____

Cell Phone: _____

Emergency Dispatch To:

The On Site Permit Holder is required to be on site at all times and be reachable by FrontRunner Rail Control (FRC) or FrontRunner Operations.

Job site address for first responders

PERMIT HOLDER IS REQUIRED TO ACTIVATE AND DEACTIVATE PERMITS 801-287-5455

RELEASE: The applicant and permit holder understand that the rail corridor is a highly hazardous environment, understand these risks, and will not sue UTA or hold UTA responsible for injuries arising from these or other dangers inherent in rail corridors.

DESCRIPTION OF WORK

WORK CONDITIONS

<input type="checkbox"/>	Current Road-Way Protection Certification	<input type="checkbox"/>	Operation of a Hi-Rail Vehicle
<input type="checkbox"/>	Work Crew may be Fouling Tracks	<input type="checkbox"/>	Right of Entry
<input type="checkbox"/>	Heavy Equipment within Right-of-Way	<input type="checkbox"/>	Outside of Fouling Zone

Level of On Track Safety (Provided by UTA)

<input type="checkbox"/>	Form B	<input type="checkbox"/>	RWIC ID: _____	On Track Safety Notes
<input type="checkbox"/>	Track Out of Service	<input type="checkbox"/>	None Cell: _____	

UTA FrontRunner Rail Control (FRC)
Phone: 801-287-5455

UTA FRONTRUNNER TRACK ACCESS COORDINATORS

Al Corona 385-433-0650 acorona@rideuta.com
Mike Stidd 385-419-8401 mstidd@rideuta.com
Carolyn Anderson 801-381-7817 caanderson@rideuta.com

FOR DISPATCH OFFICE USE

Permit Approval: _____ **Date:** _____

Active Time: _____ **Dispatcher Signature:** _____ **ID#** _____

Clear Time: _____ **Dispatcher Signature:** _____ **ID#** _____

UTA TRAX UTA STREETCAR
TRACK ACCESS PERMIT

One permit must be submitted for each day of work.

PERMIT NUMBER

This permit is for territory controlled by TRAX Control.
 For permits in territory controlled by *FrontRunner Rail Traffic Control* visit www.rideuta.com/propertymanagement

Date of Work:

Start Time:

Finish Time:

Crew Size:

CONTRACTOR INFORMATION

Company Name:

Applicant Name:

Phone:

E-mail:

RELEASE: The applicant and permit holder understand that the rail corridor is a highly hazardous environment, understand these risks, and will not sue UTA or hold UTA responsible for injuries arising from these or other dangers inherent in rail corridors.

The On-Site Permit Holder is required to:

- Be on site at all times and reachable by the TRAX Control.
- Call TRAX Control by phone to activate the Permit before work starts & call TRAX Control. (801.287.4631) to deactivate the Permit after work is done *and* crews are clear.
- Contact the Track Access Coordinator a minimum of 24 hours in advance, if the RWIC permit is not going to be activated. Permit Holder may be charged, if the coordinator is not contacted.

TERRITORY WHERE WORK PLANNED:

BLUE LINE
(Draper – Salt Lake Central)

RED LINE
(Daybreak - University)

GREEN LINE
(West Valley – Airport)

S Line (2100 S– Fairmont)

Jordan River RSC
(JRRSC Shop / Yard)

Midvale RSC
(MRSC Shop / Yard)

Garfield Line
(West Jordan – Magna)

Bacchus Line
(Garfield Line – Northrup Grumman)

EXACT LOCATION:

FROM:

TO:

Always expect a train.
Trains may travel in both directions on any track at any time.

On Site Permit Holder Name:

On Site Permit Holder Cell Phone:

DESCRIPTION OF WORK

WORK CONDITIONS

ON TRACK SAFETY

- UTA Road-way Protection
- Work will be within 10 feet of track
- Operation of Hi-rail vehicle
- Heavy equipment within right-of-way
- Work will be within 10' of overhead

- Removal of OSC power
- Grounding straps
- Test Train Requested
- RWIC Name or Radio #:

- Train approach warning
- Train Coordination
- Inaccessible track (physical separation)
- Track Out of Service
- Exclusive Track occupancy

UTA TRAX CONTROL:

Phone: 801.287.4631

Email permit requests to traxtrackaccess@rideuta.com

UTA TRAX & STREETCAR TRACK ACCESS COORDINATORS:

Jeff Woodhead: 385.218.8190 Traxtrackaccess@rideuta.com
 Michael Szemeredy: 801.654.1779 Traxtrackaccess@rideuta.com
 Scott Aubrey: 801.244.5219 Traxtrackaccess@rideuta.com

FOR RAIL CONTROL CENTER USE

Permit Approval:

Date:

Active Time:

Controller Signature:

Radio #:

Clear Time:

Controller Signature:

Radio #:

10.6 UTA RWP GOOD-FAITH CHALLENGE—NOTIFICATION AND RESOLUTION

Date: _____

Operator name: _____

Challenged RMM or hi-rail vehicle if applicable: _____

Reason for challenge:

Date challenge was resolved: _____

***Operator has the right to refuse to operate the challenged equipment until the challenge has been resolved.**

Initial if refuse to operate (_____)

Good-Faith Challenge Notification Contacts

- 1) Maintenance equipment operator call: supervisor or manager.
- 2) Supervisor or manager call: Director of Asset Management (801) 287-3671 or (801) 615-9855.
- 3) Supervisor shall contact his/her manager immediately when an operator refuses to operate a challenged RMM or hi-rail vehicle.

10.7 AUDITS

Audits of this program and UTA compliance may be conducted by the UDOT State Safety Oversight Program Manager, FTA, and FRA. UTA Management, and Safety Administrators may make announced or unannounced visits of job sites, work limits, or any other rail related work area. Such visits are audits and are to be tracked using the On-Track Safety Spot Check form, available as [ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.](#) of this program. Updated versions of this form are available electronically from UTA MOW and Safety Departments. Additionally, various other oversight activities, such as efficiency checks, are conducted as outlined in UTA's various CFR 217 plans for MOW and FrontRunner periodic oversight.

11. WORK ON PLATFORMS AND STATIONS

11.1 PURPOSE

This section of the RWP Program is designed specifically to prevent the employee or ladder from falling into the foul zone. When fall protection is required to prevent falls from heights over six feet, the responsible department will have in place a method to rescue a worker from his harness after a fall. Rapid rescue and evacuation are necessary to prevent compartment syndrome and is in accordance with 29 CFR 1910.

11.2 APPLICATION

All UTA personnel who use a ladder on platforms or stations are subject to this section and associated UTA SOP OSH 4.22 Fall Protection. Additionally, all UTA employees or contractors who perform maintenance, cleaning, or construction on platforms or stations are considered roadway workers and must abide by this program in its entirety.

11.3 USE OF LADDERS

All personnel who work while standing on any device (ladder, scaffolding, or variations thereof) must abide by permitting processes by having RWP certification and notifying Control of the work. Upside down buckets are not acceptable as ladder substitutes.

- 1) If the work is performed by two or more RWP certified personnel:
 - a. One may work on the ladder while another serves as a Watchman.
 - b. Upon the approach of a train or bus, work must stop.
 - c. The individual on the ladder may stay on the ladder.
- 2) If the work is performed by a single employee:
 - a. While off the ladder, the individual must stop work until passengers and trains have cleared the immediate area.
 - b. If neither the ladder nor the employee are secured via fall protection, then the employee must dismount the ladder until all passengers and trains have cleared the immediate area.
 - c. If using a scaffolding, the employee may remain on the scaffolding, but must stop work until passengers and trains have cleared the immediate area.
 - d. If both the ladder and employee are secured, then the employee may stay on the ladder, but must stop work until passengers and trains have left the immediate area.

If the ladder and employee cannot be secured, AND scaffolding cannot be used, AND work cannot be completed between train arrivals, THEN the work is to be scheduled during non-revenue hours.

11.4 USE OF SCAFFOLDING

- 1) All scaffolding will have proper top rails, mid rails, toe boards that meet requirements detailed in 29 CFR 1926.451.
- 2) Rolling scaffolding must have wheels locked before the employee mounts scaffolding.
- 3) A distance of 10 feet must be maintained between the OCS and scaffolding, ladders, workers, and tools in accordance with chapter 4.13 of this program.
- 4) Scaffolding must be inspected by a qualified person upon assembly and daily. This inspection will be noted on a placard secured to the scaffolding.

11.5 SECURING THE WORKER

- 1) Only full body harnesses are approved for use within UTA property.
- 2) Harnesses will be inspected upon purchase and daily upon use.
- 3) Lanyards will be approved and rated for 5,000 pounds in accordance with 29 CFR 1926.502(d).
- 4) Lanyards will attach to the harness via a D-ring between the shoulder blades of the employee.
- 5) The lanyard must be attached to a structural member of the platform or station. Prohibited anchors include, but not exclusively, electrical conduit, fascia, and finish work.

11.6 SECURING THE LADDER

- 1) Ladders will be secured to reduce the likelihood of the ladder tipping into the foul zone.
- 2) Ladders will be held by a second employee while the first secures the ladder.
- 3) Ladders will be secured to a structural member of the platform or station when appropriate, possible, and safe to eliminate the risk of damaging non-structural members of said structures.
- 4) Clamps and straps made for the purpose of securing ladders will be used.
- 5) Prohibited restraints include rope of any type.

APPENDIX A: CURRENT RWP ASSIGNMENTS

Last change made: 5/30/2024. See section [2.1.1 ASSIGNMENT OF TRAINING](#) for information on how the assignments in this section are created and maintained.

Appendix A-1 ASSIGNED TO RWP BASIC

Assigned by Title	Accountant Acting Comptroller Asst Mgr Light Rail Veh Maint Claims Administrator Claims Administrator Comptroller Construction Safety Admin Customer Experience Planner Electromechanic Electromechanic A-Level Electromechanic Helper Facilities Maintenance Manager Fare Inspection Officer Journeyist Lieutenant Light Rail-MOW Training Admin LR-MOW Instructional Designer LRV Maint Supervisor LRV Maint Supv-BodyFabrication LRV Maint Supv-BusinessSolSpec LRV Maint Supv-PartsToolsEquip LRV Maint Supv-QAQC Specialist LRV Maint Supv-Team Mentor LRV Maint Supv-TeamCoordinator LRV Maint Supv-Training Admin LRV Maint Supv-Training Spec Mgr Customer Experience Mgr Light Rail Vehicle Maint	Mgr Qual and Const Oversight Mgr Rail Technical Svcs & QA Mgr Ticket Vend Machine Assets NEPA Project Administrator Planning Researcher II Rail Quality Assurance Admin Rail Service Employee Safety Admin - Transit System Safety Administrator Safety Administrator-Const Sergeant Service Employee Sr Office Spec- LR Veh Maint Sr Office Spec- Maint of Way Technical Services Supervisor Transit Police Officer I Transit Police Officer II Transit Police Officer III Transit Police Officer IV Transit Police Officer Trainee Transit Vehicle Technician Trax Operator Trax Operator Trainee - Ext Trax Operator Trainee - Int Video Security Admin Video Security Supervisor Video Security Technician
Assigned by Badge	10285	
Assigned by Cost Center/Unit	Real Estate & TOD	
Excluded Cost Centers/Units	Bus Bus Admin - Meadowbrook Bus Admin - Mt Ogden Bus Admin - Timpanogos Bus Maintenance - Central Bus Maintenance - Meadowbrook	Bus Maintenance - Mt Ogden Bus Maintenance - Timpanogos Bus Ops - Central Bus Ops - Meadowbrook Bus Ops - Mt Ogden Bus Ops - Timpanogos

Appendix A-2 ASSIGNED TO RWP FULL (INCLUDES ALL RWP MODULES)

<p>Assigned by Title</p>	<p>Acting Mgr Rail Systems Assets Asst Mgr Rail Infra Assets Asst Mgr Rail System Assets-LR Body Shop Helper Bus System Safety Admin Class A Mechanic - Facilities Commuter Rail System Supv Facilities Engineer Facilities Equip. Repair Techn Facilities Helper Facilities Journeyist Facilities Maint Supv Facilities Service Employee Facilities Technician Fleet Vehicle Maint Admin- Bus GIS-Asset Administrator Light Rail Control Supervisor Light Rail Controller Supv Light Rail Operations Supv Light Rail System Supervisor Line and Signal A-Level Techn Line and Signal Technician LR Opns- Training Supv Maintenance of Way Supervisor</p>	<p>Maintenance Of Way Supervisor Maintenance Road Crew Manager of Right of Way Assets Manager, Systems Engineering Mgr Rail Systems Assets Network Administrator I Network Administrator II Network Administrator III Network Comm/Infra Supervisor Network Specialist Network Technician Pass Facilities Road Crew Supv Project Control Specialist Rail Maintenance Supervisor Rail Maintenance Supervisor Rail Maintenance Worker Rail Safety Administrator Rail Service Project Admin Rail Service/Ops Sr Planner Rail Service-Ops Planner Systems Engineer Telecommunications Specialist Transit Asset Administrator</p>
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APPENDIX B: ROADWAY WORKER PROTECTION LIFE TIPS

- 1) A copy of the UTA Roadway Worker Manual containing on-track safety rules must be readily available.
- 2) Never foul a track unless necessary in the performance of duty. In other words, do not walk or stand in the fouling space to conduct work unless you are absolutely certain that on-track safety has been established.
- 3) You have the right to challenge the on-track safety procedures to be applied at the job location if you believe that they do not comply with the rules of the railroad. You should remain clear of the track until the challenge is resolved.
- 4) An on-track safety job briefing must be conducted before fouling the track, and you should understand all aspects of your on-track safety to ensure that you are adequately protected. You must acknowledge that you understand the briefing and the on-track safety must be appropriate for the work that you are performing.
- 5) Remind the person providing you the on-track safety job briefing that you must be notified of any changes in the on-track safety procedures that may occur throughout the day.
- 6) You must know the identity of the worker who is in charge of the on-track safety procedures.
- 7) It is critical to know the type of on-track safety for the track(s) you are to foul.
- 8) The specific working limits must be clearly defined. Otherwise, train approach warning must be provided and, when clearing the track, the designated place of safety must be known. It is imperative that you are clear of the track before any train is not less than 15 seconds from your work location.
- 9) If the work activity has the potential to foul adjacent track(s), you must know what type of on-track safety is provided on those adjacent track(s).
- 10) If you are a Lone Worker using Individual Train Detection:
 - a. The on-track safety statement must be completed.
 - b. You have the right to use an alternate form of on-track safety other than individual train detection.
 - c. You cannot be working where there is noise (e.g., environmental, power tools, machines, etc.) or other impairments interfering with your ability to detect approaching trains.
 - d. You must be outside a manual interlockings or controlled points.
 - e. You must have the ability to clear to a predetermined area of safety.
 - f. The required sight distance must be available in order for you to be in the clear before any train is not less than 15 seconds away from your work location.
 - g. Only minor repairs, inspection, or correction work may be performed as long as they do not interfere with your ability to detect the approaching trains.
- 11) If the task involves Roadway Maintenance Machines (RMM), you must know the RMM procedures to ensure your safety.
- 12) The required on-track safety training and/or qualification must be completed before you perform your duties.
- 13) Railroad communication (e.g., radio) is required.
- 14) Stop, look, and listen before crossing any track, regardless of the on-track safety status of the track(s). Expect the movement of trains, engines, cars, or other moveable equipment at any time, on any track, in either direction.

APPENDIX C: SAFETY REQUIREMENTS & AUTHORIZATIONS REQUIRED FOR WORKERS WITHIN THE UTA RAIL ALIGNMENTS

In an effort to simplify processing for UTA Department of Property Management, this Appendix outlines the necessary precautions necessary for UTA and non-UTA personnel who wish to access the ROW. The table below outlines the basic insurance, training, and protection requirements. Other requirements, as outlined in the RWPP may apply.

Definition of work areas covered by this Appendix:

- 1) Work taking place inside the railroad alignment (the fence line, outer curb or double yellow line delineate the boundary). This includes stations.
- 2) Work taking place within fouling distance (10 feet) of the track or having the potential to impact rail operations. This includes crane operations where the crane has the potential to swing over the alignment/catenary.

Minimum Requirements Listed:

The safety and authorizations requirement that are stated in this document are the minimum requirements. Based on the type of work, additional requirements and authorizations may be required. If you have questions as to which type of work may have additional requirements, please contact a UTA Track Access Coordinator and/or UTA Property Manager or Administrator.

Questions about classifying work:

If a circumstance arises that is not covered by this document or there are questions as to where an activity would be classified on this document, please contact a UTA Track Access Coordinator and/or a UTA Property Manager or Administrator for clarification, or refer the party requesting the access to a UTA Track Access Coordinator or a UTA Property Manager or Administrator.

Worker	Type of Work	Safety Requirements & Authorizations Required
Adjacent Property Owners	TRAX & STREETCAR Alignments: Graffiti Removal (Only paint, paint brushes/rollers and extenders. If ladders or scaffolding used, must follow rules for contractors.)	Restricted Access: Must stay at property line, stay at least 15 feet from tracks, and cross tracks only at public crossings Wear required PPE (Personal Protective Equipment) Track Access Permit Authorization from on-duty Controller (via activating Track Access Permit)

Worker	Type of Work	Safety Requirements & Authorizations Required
	FrontRunner Alignment: Graffiti Removal (Only paint, paint brushes/rollers and extenders. If ladders or scaffolding used, or working on a day other than Sunday, must follow rules for contractors.)	Sunday only when trains are not running (due to tight clearances & high speeds) UTA RWIC required from Rail Services Restricted Access: Must stay at property line, cross tracks only at public crossings Wear required PPE Track Access Permit Authorization from on-duty Controller (via activating Track Access Permit)
Contractors (both contractors working for UTA* and contractors doing non-UTA work)	Any type, any area <i>*See exception for certain UTA Facilities contractors in "UTA Employees at Stations" section</i>	Licensing/Right of Entry (or letter of consent from UTA Property) RRPLI (Railroad Protective Liability Insurance) Current UTA RWP Certification of the appropriate level Wear required PPE Track Access Permit Authorization from on-duty Controller (via activating Track Access Permit)
UTA Employees at Stations <i>*Certain UTA Facilities contractors are allowed to follow the UTA Employees at Stations guidelines. UTA Facilities will ensure these contractors have RRPLI and current RWP.</i>	Minimal Impact (E.g. changing posters, emptying garbage cans, accessing PCC cabinets, etc.)	Wear required PPE (Personal Protective Equipment)
	Moderate Impact (e.g. short duration work involving small equipment on the platform including ladders, pressure washing stations outside of revenue service, replacing glass shelter panels, etc.)	Current UTA RWP Certification Wear required PPE Authorization from on-duty Controller (call Control to call onto alignment/station; call Control to report when clear) In accordance with UTA SOP 4.3.4
	Significant Impact (E.g. removing/replacing concrete, moderate to large equipment used, etc.)	Current UTA RWP Certification of the appropriate level Wear required PPE Track Access Permit (information will appear on operations Clearance/Bulletin) Authorization from on-duty Controller (via activating Track Access Permit)
Authorized UTA Rail Service & Facilities Employees on	Minimal Impact (E.g. accessing shack or substation on edge of alignment outside of foul zone, etc.)	Current UTA RWP Certification Wear required PPE

Worker	Type of Work	Safety Requirements & Authorizations Required
Alignment at locations other than stations	<p>Moderate Impact</p> <p>(E.g. short duration work involving accessing shacks between tracks, minor repairs/maintenance, landscape maintenance along alignment adjacent to track, etc.)</p>	<p>Current UTA RWP Certification</p> <p>Wear required PPE</p> <p>Authorization from on-duty Controller (call Control to call onto alignment/station; call Control to report when clear)</p>
	<p>Significant Impact</p> <p>(E.g. major repairs/maintenance, catenary and track inspections with hi-rail vehicles, maintenance of grass track, etc.)</p>	<p>Current UTA RWP Certification of the appropriate level</p> <p>Wear required PPE</p> <p>Track Access Permit (information will appear on operations Clearance/Bulletin)</p> <p>Authorization from on-duty Controller (via activating Track Access Permit)</p>
Other Contractor or UTA Employee on alignment at locations other than stations	<p>Escorted:</p> <p>Minimal/Moderate Impact</p> <p>(E.g. Blue stakes, meter reading, scoping alignment for future plans, taking survey measurements, short duration activities fouling tracks but clearing for trains, etc.)</p>	<p>Must be escorted at all times by an authorized UTA RWIC from UTA Rail Services or UTA Facilities who has UTA RWIC certification</p> <p>Wear required PPE</p> <p>UTA RWIC follows safety and authorization requirements as noted in the "Authorized UTA Rail Service & Facilities Employees on Alignment at locations other than stations" section</p>
Other UTA Employees on alignment at locations other than stations	<p>Non-escorted:</p> <p>Minimal/Moderate/Significant Impact</p> <p>(Any type, all areas other than stations)</p>	<p>Current UTA RWP Certification at the appropriate duty level</p> <p>Wear required PPE</p> <p>Track Access Permit (information will appear on operations Clearance/Bulletin)</p> <p>Authorization from on-duty Controller (via activating Track Access Permit)</p>

APPENDIX D: RWP SPOT CHECK EXAMINER CHEAT SHEET

The cheat sheet on the next page is intended as a set of general guidelines and as an aid for access the spot-check form online for any examiners who will be performing RWP Spot Checks. The information on this sheet should not be taken as a hard requirement.

RWP SPOT CHECKS

USING THE LASERFICHE APP

1. Connect to Global Connect
2. Open the Laserfiche App
3. Server URL: <https://vega.uta.cog.ut.us/>
4. Log in with email address and UTA password
5. Click the menu on the top right and go to "Start Process"
6. Tap "Start" on the RWP Spot check form

EXAMINER GUIDELINES

- Be polite and professional
- Minimize disruptions
- Be accurate and objective
- Complete the form entirely
- Enact mitigations for all non-compliance
- Escalate push-back to RWP Program Manager, don't engage in an argument

MINOR MITIGATIONS

INDIVIDUAL/GROUP COACHING

Examiner briefly explains the corrections that need to be made in order to be in compliance.

- Minor rule infraction
- Sharing best practices
- Easily corrected behaviors

WORKER REMOVED FROM SITE

The individual worker who is out of compliance is removed from the workgroup. Their supervisor should be informed that they will need to be assigned to non-RWP work until the issue is resolved.

- Expired or missing RWP Card (Cards can only be reissued by a certified trainer)
- PPE missing (FRA or OSHA)
- Radio is dead or missing

RWP CONTACT INFO

RWP Program Manager - Owen Thompson
 othompson@rideuta.com
 801 287-3424 [Desk] / 801 550-3777 [Cell]

MAJOR MITIGATIONS

WORK STOPPAGE

A temporary stand-down of work. Work may resume once the inciting issue has been resolved.

- Non-compliance with minor mitigation
- On-Track Safety is not suitable for work or is incorrectly established
- RWIC/Watchman performing RWIC duties without clearing group from the track first
- RWIC without a functional radio
- Inadequate or missing safety briefing
- Workers unable to identify RWIC, watchman, etc.

SITE SHUTDOWN

Work is stopped and cannot resume until reviewed by responsible parties and the RWP Program Manager

- On-Track Safety not established
- RWIC is not present and accessible on-site
- OSHA Incident, e.g. injury or death

OTHER MITIGATIONS AT EXAMINER'S DISCRETION