



Metropolitan Transportation Authority

Metro

**CONSTRUCTION SAFETY AND
SECURITY MANUAL (CSSM)**

REVISION 4.1: SEPTEMBER 1st 2012



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POLICY STATEMENT

The safety and security requirements of this Manual reflect the determination of the Los Angeles County Metropolitan Transportation Authority (Metro) to prevent injuries to persons and or loss or damage to property and equipment during construction activities contracted by Metro. It is the stated goal of this Agency and the expected goal of consultants, contractors, vendors and or others doing business with Metro.

Metro considers no phase of construction or administration of greater importance than injury and loss prevention. Incidents resulting in personal injury to employees or the general public, damage to property and or equipment, or the theft or vandalism or property and or equipment represent needless waste and loss. It is the policy of Metro to conduct operations safely and securely, thereby preventing injuries and property damage or loss.

Contractors shall adhere to the following safety principles:

- Safety and Security are a 24/7 priority
- Safety and Security are everyone's responsibility
- Injuries and incidents are preventable
- Working safely and securely is a condition of employment
- Training is essential for good safety and security performance
- Management is accountable for safety and security

Planning for safety and security shall start with design and continue through purchasing, fabrication and construction. All practical steps shall be taken to maintain a safe and secure place of employment. The contractors shall be responsible for the prevention of incidents and injuries on any work under their direction or responsibility and shall be responsible for the thorough safety and loss control training and instruction of their employees.

The objectives of this Construction Safety and Security Manual are first, the promotion of the attitude that injuries and loss are not "part of the work" in construction. Second, that the prevention of injuries and the protection of employees and property are most important and therefore shall receive top priority, support and the participation of senior MTA Management and staff as well as that of all parties involved in construction.

Art Leahy
Chief Executive Officer, LACMTA

Date

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Executive Director, Transit Project Delivery

Date

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Executive Officer, Corporate Safety

Date

REVISION HISTORY AND PURPOSE

This document began as the Construction Safety Manual and was a part of the Metro Red Line and Green Line Construction Contracts. It grew out of the experience of the Construction Safety Team during the construction of the Long Beach Blue Line and Metro Red Line Segment One Projects.

Revision 2 retained the title Construction Safety Manual and included some of the latter lessons learned from Red Line Segment One and was used on Red Line Segments Two and Three and the Metro Green Line.

With the Publishing of Revision 3 in 2002, the title was changed to the Construction Safety & Health Manual. Revision 3 included lessons learned from Segments Two and Three of the Metro Red Line as well as the growing number of Capital Improvement Projects being undertaken by Metro.

With this Revision 4, in keeping with the changes in focus at both the federal and state levels of regulation, the document is being renamed the Construction Safety and Security Manual. It includes Lessons Learned from the Pasadena and East LA portions of the Metro Gold Line, Phase One of the Exposition Line, the I-405 Sepulveda Pass Widening Project and the continued work on various Metro Capital Improvement and Expansion Projects.

Revision 4.1 incorporated performance language and requirements regarding the Safety's First Incentive Program from the Special Provisions Section of the Contract into Sections 4 & 8 of this document as well as various minor grammatical and format updates.

The purpose of this manual is to provide prime and other contractors a starting point for complying with the administrative and documentation requirements of the Metro Construction Safety Program. It also provides the Contractor with information regarding interpretations of the requirements found in the Worksite Safety and Worksite Security Technical Specifications. The information and requirements in this Manual are considered complementary and supplemental to the requirements of the Worksite Safety Requirements and Worksite Security Requirements of the contract found in the General Requirements Division of the Technical Specifications and elsewhere. Any concern by a Contractor regarding perceived conflicting language or interpretations of the requirements of the Metro Construction Safety Program and the associated Contract Documents shall be brought to the attention of the Metro Construction Manager in writing for interpretation and clarification by the Director, Construction Safety or designee.

ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
Cal/OSHA	California Occupational Safety and Health Act
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CLC	California Labor Code
CM	Construction Manager
CPR	Cardio-Pulmonary Resuscitation
CSO	Construction Safety Orders (CCR Title 8)
CSSM	Construction Safety and Health Manual
CSM	Construction Safety Manager
DAR	Daily Activity Report
DOSH	State of California, Division of Occupational Safety and Health
EPA	Environmental Protection Agency
ESO	Electrical Safety Order (CCR Title 8)
Fed/OSHA	Federal Occupational Safety and Health Administration
GISO	General Industrial Safety Orders (CCR Title 8)
IIPP	Injury-Illness Prevention Program
JHA	Job Hazard Analysis
MTA	Los Angeles County Metropolitan Transportation Authority
LADOT	City of Los Angeles Department of Transportation
LSR	Lead Safety Representative
MSDS	Material Safety Data Sheet
NEC	National Electric Code
NFPA	National Fire Protection Association
NIOSH	National Institute of Occupational Safety and Health
NTP	Notice To Proceed
RE	Resident Engineer
SCAQMD	South Coast Air Quality Management District
SS	Safety Specialist or Senior Safety Specialist
USA	Underground Service Alert

DEFINITIONS

Alternate Safety Coverage Policy	A policy for providing contract compliant safety supervisory coverage for small work crews or in the event of the absence of the regularly employed. See Section 2.4.
Metro or MTA	The Los Angeles County Metropolitan Transportation Authority (LACMTA) and/or the Metro Construction Safety Department.
Competent Person	As defined in California Code of Regulations, Title Eight, Section 1504, a competent person is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
Construction Manager (Metro)	The Metro or designated consultant team responsible for construction management of a Metro Transit project.
Construction Safety Manager (Metro)	A staff member of Metro Construction Safety Department assigned to a particular set of contracts or a specific construction project. Construction Safety Specialists are directly supervised by Metro Construction Safety Manager.
Construction Safety Department (Metro)	The Construction Safety Unit of the Corporate Safety Department.
Construction Safety Specialist (Metro)	A staff member of the Metro Construction Safety Department assigned to a particular set of contracts or a specific construction project. Safety Specialists focus on Field Reviews of Contractor Contract Compliance.
Construction Safety Staff (Metro)	The Staff of the Metro Construction Safety Department includes (at minimum) Safety Specialists, Senior Safety Specialists, Construction Safety Managers and the Director, Construction Safety.
Contract	Written agreement executed by Metro and the Contractor which sets forth the rights and obligations of the parties in connection with the Work, and which includes the Contract Documents as listed in the Form of Contract.

Director, Construction Safety

The Director, Construction Safety leads the Construction Safety Department. The Director, Construction Safety works closely with the Executive Director, Transit Project Delivery as well as individual Project Directors, Construction Safety Staff and the Executive Officer, Corporate Safety to insure the success of the Construction Safety Program as described in this Manual and other Contract Documents.

Falsework

Temporary construction work on which a main work is wholly or partly built and supported until the main work is strong enough to support itself. It may be composed of composed of shoring or vertical posting, formwork for beams, slabs or other horizontal members, and lateral bracing.

Hot work

Any work involving a flame or producing a spark, such as the use of a torch, grinder or electric arc welder.

Lead Safety Representative
(Contractor)

A full-time supervisory employee of the Contractor responsible for the implementation of the Contractor's safety and security program at the Worksite. The Lead Safety Representative shall be currently certified in first-aid and CPR by the American Red Cross or its equivalent. The Lead Safety Representative must be assigned full time to the jobsite whenever Work is in progress. The Lead Safety Representative may be assigned non-safety related tasks provided these tasks do not interfere with successful performance of the assigned safety and security responsibilities. The Lead Safety Representative shall regularly work the day shift, attend required meetings and be fully cognizant of all project-specific safety practices, processes, rules and procedures, and maintain regular contact with Metro designated Safety Personnel. This position is typically specified in Capital Improvement Project Contracts that do not require Heavy Civil Engineering or Construction.

This term is also used generically in this document to refer to the various 'Lead Safety Representative' positions defined in this section. When used generically, this term refers to the specifically defined Lead Safety Representative from the Worksite Safety Requirements Technical Specification included in this Contract.

Lead Heavy Civil Safety Representative (Contractor)

Full-time supervisory employee of the contractor responsible for the implementation of the Contractor's safety and security program. Requires at least five years of heavy civil construction safety experience, current standing as a Construction Safety and Health Technician (CHST), familiarity with occupational safety and health laws and regulations, and have current certification in first-aid and CPR by the American Red Cross or its equivalent. The Lead Heavy Civil Safety Representative must be assigned full time to the jobsite whenever Work is in progress and shall regularly work the day shift, attend required meetings and be fully cognizant of project-specific safety practices, processes, rules and procedures, and maintain regular contact with Metro Safety Staff assigned to the Project. The Lead Heavy Civil Safety Representative shall not be assigned non-safety related tasks

Lead Underground Safety Representative (Contractor)

Full-time supervisory employee of the contractor responsible for the implementation of the contractor's safety and security program. Requires at least five years of underground construction safety experience, current standing as a Construction Safety and Health Technician (CHST), familiarity with occupational safety and health laws and regulations, have current certification in first-aid and CPR by the American Red Cross or its equivalent, and have current certification by Cal/OSHA, Mining and Tunneling Division as both an Underground Safety Representative and an Underground Gas Tester. The Lead Underground Safety Representative shall regularly work the day shift, attend required meetings and be fully cognizant of all project-specific safety practices, processes, rules and procedures, and maintain regular contact with Metro designated Safety Personnel.

Near Miss

An incident having the potential to cause death, serious injury or illness, or property damage exceeding \$500.00.

Personnel Platform

Any platform or other working surface designed to be suspended from a crane while carrying personnel. These devices may be used to work from or they may be used to transport personnel from one point to another. Other names for these devices include, but are not limited to: man baskets, man cages, and work platforms.

Project Manager (CM)(Metro)

The construction manager's senior Metro management official responsible for the project, beginning with pre-construction activities and extending to final completion of the work. This individual may have an employment title other than Project Manager but they serve the function of a Project Manager.

Resident Engineer (RE)(Metro)

The field representative of Metro responsible for the completion of specific construction contracts. The Resident Engineer is responsible for directing the contractor with regard to compliance with the Contract requirements. This individual may have an employment title other than Resident Engineer but they serve the function of the Field Representative of Metro and direct the Contract's Work.

This term is used generically in this document to refer to the Project Manager, Construction Manager or Resident Engineer positions as defined in this section. Based on the size and scope of the Work, a single Metro employee may fill one, two or all three of these functions. Any Reference to the "Resident Engineer" in this manual includes the Construction Manager and Project Manager.

Safety Representative
(Contractor)

A full-time supervisory employee of the Contractor responsible for assisting the Lead Safety Representative in the implementation of the Contractor's safety and security program at the Worksite. The Safety Representative shall be currently certified in first-aid and CPR by the American Red Cross or its equivalent. The Safety Representative must be assigned full time to the jobsite whenever Work is in progress and the Lead Safety Representative is absent. The Safety Representative may be assigned non-safety related tasks provided these tasks do not interfere with successful performance of the assigned safety responsibilities. This position is typically specified in Capital Improvement Project Contracts that do not require Heavy Civil or Underground Engineering or Construction.

Safety Representative
(Contractor)(continued)

This term is also used generically in this document to refer to the various 'Safety Representative' positions defined in this section. When used generically, this term refers to the specifically defined Safety Representative from the Worksite Safety Requirements Technical Specification included in this Contract.

Heavy Civil Safety Representative
(Contractor)

Full-time supervisory employee of the contractor responsible for assisting the Lead Heavy Civil Safety Representative in the implementation of the contractor's safety and security program. Requires at least two years of heavy construction safety experience, current standing as a Construction Safety and Health Technician (CHST), familiarity with occupational safety and health laws and regulations, and have current certification in first-aid and CPR by the American Red Cross or its equivalent.

Underground Safety Representative
(Contractor)

Full-time supervisory employee of the contractor responsible for assisting the Lead Underground Safety Representative in the implementation of the contractor's safety and security program. The individual shall possess at least two years of underground construction safety experience, current standing as a Construction Safety and Health Technician (CHST), be familiar with occupational safety and health laws and regulations, be currently certified in first-aid and CPR by the American Red Cross or its equivalent, and be currently certified by Cal/OSHA, Mining and Tunneling Division as both a Underground Safety Representative and an Underground Gas Tester.

Scaffolding

Any temporary elevated platform and its supporting structure used for supporting workmen or materials, or both.

1 ADMINISTRATION AND ORGANIZATION

1.1 Purpose and Scope

The purpose of this manual is to establish a practical and effective program for the prevention of and response to incidents and injuries, and to assign specific responsibilities to contractors for program compliance.

This basic safety program has been designed to assist all contractors and their supervisors in the recognition, evaluation and control of hazardous activities or conditions within their respective areas of contract responsibility.

The minimum incident and injury prevention efforts expected from each contractor are indicated in the following sections. Activities or conditions which do not meet or exceed these minimums as determined by Metro shall be considered not in compliance with this contract. Such activities shall be corrected by the contractor immediately upon notification by Metro. Corrective actions by the contractor as determined by Metro shall be considered part of the original scope of work and shall not delay the schedule for performance of work by the contractor nor shall they be the basis for any claim of delay or to increase the cost of the Contract.

Strict compliance with the provisions of this manual as determined by Metro shall be considered part of the original scope of work and shall not delay the schedule for performance of work by the contractor nor shall they be the basis for any claim of delay or to increase the cost of the Contract.

No declaration, act, or omission of the Director, Construction Safety, Los Angeles County Metropolitan Transportation Authority (Metro), or its staff will be deemed to exempt, either wholly or in part, expressly or by implication, any contractor or the contractor's place of employment, on Metro contracts, from full compliance with the terms of any safety regulation as stated by the Federal government, the State of California, the County and or City of Los Angeles or other jurisdictions applicable to the contractor's work on Metro project.

1.2 Program Structure

The development of the current Construction Safety Programs implemented by Metro's Construction Safety Unit, which is part of the Corporate Safety Department, has been decades long and began with the construction of the Long Beach Blue Line in the 1980s. The Program has evolved and grown in its sophistication in a manner parallel to that seen in the overall Occupational Safety and Health Profession during the same time frame. The philosophical foundation of this program is that safety hazards, when identified, are controlled or corrected immediately. If the hazard cannot be controlled or corrected immediately, dependent on the severity of the hazard, the work in the area is stopped until the hazard is controlled or corrected. The Program's sophistication includes the maintenance of a Lessons Learned document (part of the Department Policy & Procedure Documents) which allows for the tracking of major construction safety issues and the contractual remedies or responses to these issues.

The Program has four key components:

- * Metro Professional Construction Safety Staff as part of the overall Project Management Team guided by the Construction Safety Policies and Procedures;
- * Contract documents including technical specifications, compliance manuals and the General and Special Provisions;
- * Contractor Professional Safety Staff as part of the Contractor's Project Management Team;
- * Allied safety professionals including (but not limited to) insurance industry loss prevention professionals, Division of Occupational Safety & Health (Cal-OSHA) Consulting staff, Cal-OSHA Compliance staff, both generalist and Mining & Tunneling Unit specialists, Federal OSHA Consulting staff and other OHS resources.

METRO PROFESSIONAL SAFETY STAFF/PROJECT MANAGEMENT TEAM

The best Safety Management Plans, whether occupational, industrial, product or other, are based upon safety being a priority not only for every member of the management team, but every member of the entire team or organization. This philosophy is reflected in the various documents and organizational structure of the Metro Construction Project Management Division.

The Construction Safety staff assigned to a project undertake various compliance checking activities (including but not limited to submittal review, field observations, formal administrative and field reviews, injury & incident trending) to insure the compliance and quality of the Contractor's Construction Safety activities. Safety Specialists document their work on a daily basis using the Daily Activity Report. Safety Specialists use their Daily Activity Reports to document and describe issues or conditions that are not controlled or corrected at the time of discovery. Daily Activity Reports are reviewed by the Construction Safety Manager. Staff activities are overseen and reviewed by the Director of Construction Safety.

BASELINE CONTRACT DOCUMENTS

The Contract Documents are the core of the Construction Safety and Security requirements for this project. Each document requires the contractor to submit documentation to substantiate compliance with the requirements of each technical specification or other contract document. Each submittal is required to be resubmitted as conditions change on the project.

The core documents which proscribe the contractor's duties and responsibilities are the Worksite Safety and Worksite Security Technical Specifications. These specifications communicate to the contractor Metro's compliance requirements with regard to Worksite Safety and Security (including workers, visitors and the public). Each specification includes general compliance, submittal and specific work practice requirements.

The Construction Safety & Security Manual, (this document), describes the overall Construction Safety Program, the administrative requirements expected of the Prime Contractor and each tier of sub-contractor prosecuting a construction project for Metro and provides guidance information to insure information provided by the Contractor to fulfill Contract Safety & Security submittal requirements is consistent between the various Metro construction projects.

The Alcohol and Drug Free Workplace Program documents the activities required of the Prime and each tier of Sub-Contractor prosecuting a project for Metro. The original inclusion of this document into Metro Contracts was in response to the observed and well known issues with on the job use of intoxicants by members of the construction trades and others. This section of contract requirements (found in Section 4 of this manual) presently goes beyond the requirements found in Federal, State or Local laws or regulations regarding employees in 'safety sensitive' position to better insure a workplace free of intoxicants and to stand as an example of construction industry best practices by including all employees on the Construction Site.

On larger value Heavy Civil and Tunnel Projects a Special Provision of the Contract outlines the incentive program available to the contractor. In addition, most construction Contracts include a Special Provision which requires the levy of liquidated damages in the event the contractor violates certain Special Circumstances.

CONTRACTOR PROFESSIONAL SAFETY STAFF/PROJECT MANAGEMENT TEAM

The Contractor's Professional Safety Staff and Project Management Team (including management staff at each tier of supervision down to forepersons or other line supervisors) is a critical component of the overall Metro Construction Safety Program. These individuals will direct the contractor's individual workers on a daily basis and will have the greatest opportunity to modify the behavior of those with the greatest risk of injury by reinforcing positive safety behaviors, retraining or otherwise redirecting at risk or unsafe behaviors.

The Worksite Safety Requirements Technical Specification Section requires the Prime Contractor to employ a full time Lead Safety Representative who meets the contract requirements as well as additional Safety Representatives (and Underground Gas Testers) as needed to provide coverage as required in the contract and the California Code of Regulations. Depending upon the Scope of Work of the Project, the Worksite Safety Requirements will define and require a Lead Safety Representative, a Lead Heavy Civil Safety Representative, or a Lead Underground Safety Representative. For Projects working multiple shifts the Contractor may be required to utilize one or more Safety Representatives, Lead Heavy Civil Safety Representatives, or Underground Safety Representatives to support the Lead.

Heavy Civil and Underground Safety Representatives must be certificated as a Construction Health & Safety Technician. In addition, Underground Safety Representatives must be licensed by the State of California, Division of Occupational Safety & Health, Mining & Tunneling Unit as an Underground Safety Representative and an Underground Gas Tester. Individuals utilized solely as Underground Gas Testers must be licensed by the State of California, Division of Occupational Safety & Health; Mining & Tunneling Unit as an Underground Gas Tester.

The Technical Specifications also outline a variety of safety and security related duties and responsibilities for the Contractor's Project Manager and various levels of managers and/or supervisors. Compliance with these requirements leads to a proactive and forward looking management team.

ALLIED SAFETY PROFESSIONALS

The Contractor's Project Manager may employ allied safety professionals due to insurance agreements or other obligations/sources. The larger the number of individuals available to observe and report on construction site activities, the greater the chance to modify unsafe behaviors and reinforce good safety practices. While these individuals, due to their limited amount of time on the jobsite, account for the smallest amount of observational opportunities; they may additionally observe actions or conditions that have been missed by others due to their frequency of occurrence or the distraction of other priorities.

In addition to the professionals noted above, as needed, both the Contractor's and Metro's Safety Professionals have at their disposal the resources of the U.S. Mine Safety and Health Administration (MSHA) including personnel at the MSHA Academy, the California Division of Occupational Safety and Health Consultation Office and the National Institute of Occupational Safety & Health (NIOSH).

1.3 Program Objectives

The overall objective of this program is to establish the concept that people not property are our most important assets.

All project safety and loss control efforts shall be directed towards the elimination of personal injuries and damage to property, and minimizing the effects of incidents on both the individuals and on the project.

Specific objectives of the program are:

- A. The elimination of worker injuries during construction activities on the Project.
- B. The prevention of any physical injury to a member of the public as a result of construction activities on the Project.
- C. The elimination of damage to equipment used to construct the Project.
- D. The prevention of any damage to the property of others as a result of construction activities on the Project.
- E. The elimination of loss of equipment or materials used to construct the Project.
- F. Increased efficiency and cost reductions.
- G. Compliance with contractual and statutory requirements.
- H. Maintenance of favorable labor and community relations.
- I. Improvement of relationships with regulatory agencies.
- J. Avoidance of penalties.

1.4 Program Effectiveness

The effectiveness of Metro construction safety program depends on the active participation and cooperation of personnel assigned to the project. It is the responsibility of all assigned personnel to carry out the following:

- A. Proper planning of all work to minimize the potential for and maximize the prevention of personal injury, property damages and loss of productive efforts.

- B. Establish and maintain a safety program which will provide early detection and correction of unsafe practices and conditions.
- C. Provide adequate protection of adjacent public and private properties to provide for the safety of the public.
- D. Establish and implement safety education and incentive programs that focus on the following:
 - i. Employee indoctrination.
 - ii. Safety meetings and safety communications.
 - iii. Investigation of incidents to determine cause and necessary corrective actions.
 - iv. Use of proper work procedures, personal protective equipment and mechanical guards.
 - v. Safety instruction to individual employees and group safety training program.
 - vi. Maintenance of records of injuries and losses and development of injury/loss experience summaries.
 - vii. Programs to reward employees for working safely and consistently raising the level of safety awareness on the project.

1.5 Administration and Organization

A. ADMINISTRATION

Metro, through this document, and other contract parts is establishing performance standards for safety during the course of the project. Oversight of these standards shall be by Metro through the Director, Construction Safety. Metro will oversee individual contractor performance for compliance with applicable federal, state, local and Metro's safety, security and environmental requirements. Metro will monitor for compliance, construction safety and security matters on the worksite; and will, through the Resident Engineer or Construction Manager, hold each contractor responsible for the safety, security, and contractual requirements. Each contractor shall be held accountable for the safe, secure and healthful performance of work by their employees and subcontractors, regardless of tier.

Each contractor is directly responsible for the implementation and administration of Metro's safety and security standards as well as Federal, State, and local regulations applicable to its own operations and those of its subcontractors regardless of tier. Each prime contractor shall have a full time on-site Lead Safety Representative or Safety Representative as indicated in the Technical Specifications Section of the Contract. Prior to commencement of work, contractor's Project Manager, Superintendent, Lead Safety Representative and other Safety Representative(s) shall attend safety indoctrination and coordination conference with Metro's Director, Construction Safety, Construction Safety Manager, and or Safety Specialist and the Construction Manager and or Resident Engineer for the Project. At this meeting, the Safety and Security Technical Specifications and other Contract Documents for the Project will be reviewed.

To assist contractors in fulfilling their responsibility, field safety reviews shall be conducted by the Metro Construction Safety Staff. Whenever an uncontrolled safety

hazard, unsafe practice or security vulnerability is observed, a supervisory representative of the contractor will be notified immediately to address the situation. A situation which cannot be controlled, corrected or otherwise addressed immediately will be tracked by Metro Construction Safety Staff until it is controlled, corrected or otherwise addressed via the DAR. As conditions warrant, work in the area of the hazard may be stopped until the hazard is properly addressed.

B. GENERAL DUTY STATEMENT

1. It is the duty of supervisory personnel, regardless of their employer or contracting tier, to take immediate corrective actions possible when they discover, or have reported to them, an unsafe condition or unsafe employee act on the Metro project.
2. Contractors shall comply with the California Code of Regulations Title 8; Title 29 of the Code of Federal Regulations, or the provisions of this contract whichever is most stringent in regulating the safety conditions to be maintained in the work environment as determined by Metro. The contractor recognizes that government promulgated safety regulations are *minimum standards* and that additional safeguards may be required by Metro to insure worksite safety and prevent loss.
3. Strict Compliance with the requirements of this manual, the Worksite Safety and Security Requirements Technical Specifications and other parts of the Contract related to Safety and Security, as determined by Metro shall be considered part of the original scope of work and shall not delay the schedule for performance of work by the contractor, nor serve as the basis of a request for change to increase the cost of the Work or shall it be relied upon to form the basis of any claim.
4. Documents, reports and materials required by this manual, the Worksite Safety and Security Requirements Technical Specifications or other parts of the Contract related to Safety and Security, to be completed, submitted, maintained in file or otherwise handled by the contractor shall be considered the property of Metro and shall be available at all times for review by Metro without prior notice to the contractor. Where required by law, the contractor shall maintain a copy of these records for their purposes.
5. Documented violations of the requirements of this manual the Worksite Safety and Security Requirements Technical Specifications and other parts of the Contract related to Safety and Security, may result in the levying of Special Assessments in accordance with the Special Provisions of this contract. All penalties proposed shall be determined in strict compliance with Metro Construction Safety Department Policy and Procedure Manual and the Contract Documents.

C. SAFETY DUTIES AND RESPONSIBILITIES

1. Metro

Metro desires to ensure that each participant in Metro construction contracts observe, at minimum, the required safety and security standards in the performance of their work. The Metro's goal is the effective execution of a comprehensive occupational safety, security, and environmental program which best serves the interests of the workers involved in the construction of the Project

and those of the general public. The responsibility for implementation of and compliance with the Metro Construction Safety Program lies with the Prime Construction Contractor. Metro monitors the day-to-day management of the project's overall safety program as set forth in this Construction Safety and Security Manual. Metro is responsible for:

- a. Monitoring the effectiveness of the contractor's safety program.
- b. Requiring timely application of safety and injury prevention procedures.
- c. Reporting unsafe work conditions wherever observed to the contractor's Safety Representative or to the project manager/superintendent for immediate corrective action.
- d. Notifying the Resident Engineer (RE) and or Construction Manager (CM), electronically or in writing, of non-compliance with project safety requirements. Notification of non-compliance by contractors shall also be made to Metro Director, Construction Safety or designee.
- e. Notifying Metro's project management team of the names of contractors, subcontractors, or any individuals who continually or deliberately violate safety and security requirements or regulations and, where appropriate, initiating action to remove the contractors, subcontractors, or an individual from the Project as well as prohibiting entry on to other Metro Projects or properties.
- f. Metro Director, Construction Safety, may order the temporary or permanent removal of an individual from Project sites who continually or deliberately violate safety requirements.
- g. In the event of a safety hazard or security vulnerability requiring immediate corrective action(s), or non-compliance with a written notice of a hazard or vulnerability ; Metro Director, Construction Safety or designee may order a work stoppage until such time as the condition is corrected.
- h. Maintain a Safety Incentive Program (SIP) (when included in the Projects Contract Documents) for contractors that meet or exceed the safety goals established for the project.

2. Metro Director, Construction Safety

The Director, Construction Safety or designee shall perform or oversee the performance the following functions:

- a. Daily management of the Constructions Safety Units resources, including personnel, budgets and other resources as needed.
- b. Development of individual project contract documents with respect to Safety and Security sections.
- c. Oversight of construction safety activities performed by Construction Safety Staff.
- d. Final determination of compliance with contract safety requirements.

3. Metro Construction Safety Manager

The Metro Construction Safety Manager or designee shall perform the following functions:

- a. Daily oversight of the Contractor's management of the project's safety and security program.
- b. Review and approval of Contractor Safety or Security related Submittals required by the Contract Documents.
- c. Development of individual project specific safety plans.
- d. Oversight of construction safety activities.
- e. Determination of compliance with all contract safety requirements.
- f. Receive copies of the contractor's initial and subsequent injury reports for review and analysis to determine causes, corrective actions and actions to prevent a recurrence of the same or similar incident.
- g. Supervision and direction of Metro Construction Safety Specialists as assigned by the Director, Construction Safety.

4. Metro Construction Safety Specialists

The Metro Construction Safety Specialists shall have the authority to issue stop-work orders to any contractor or subcontractor who fails, or refuses to take prompt corrective action when given notice of non-compliance with any applicable safety requirement or the identification of an uncontrolled safety hazard, unsafe act or security vulnerability.

Construction Safety Specialist shall perform the following functions:

- a. Review and comment on Contractor Safety or Security related Submittals required by the Contract Documents as directed by the Construction Safety Manager.
- b. Maintain a file of Daily Activity Reports and of any written safety notices issued to the contractor(s).
- c. Report, in writing as required by Department Policies and Procedures, through the Construction Safety Manager so that the Metro is well informed at all times.
- d. Provide technical assistance to contractors and field safety personnel, including instruction, proper reporting, recordkeeping or other safety, health or environmental procedures.
- e. Review work areas on a regular basis as determined by the Construction Safety Manager. These reviews shall be for the purposes of confirming contractor compliance and shall not be considered to be exhaustive or complete reviews of the entire worksite on any specific day. These reviews shall not relieve the contractor of the statutory and contractual obligation to identify and correct unsafe conditions or practices.
- f. Perform environmental health and safety testing or monitoring as determined by the Construction Safety Manager.
- g. Monitor the contractor's employee safety indoctrination program.
- h. Attend contractor's weekly toolbox safety meetings on a regular basis as determined by the Construction Safety Manager.
- i. Notify the Director, Construction Safety, Construction Safety Manager, Resident Engineer and or Construction Manager electronically or in writing of

unsafe conditions, actions or security vulnerabilities which cannot be immediately addressed and controlled or resolved by the Contractor. This notification shall be completed in compliance with the Construction Safety Policies and Procedures.

- j. Assist with an Metro approved safety audit program to ensure compliance with the Metro Construction Safety Program.

5. Resident Engineer/Construction Manager

Metro Construction Safety, in association with the Resident Engineer/Construction Manager shall oversee the contractor's timely application of injury and incident prevention procedures for construction activities and personnel on the project including subcontractors, visitors, and suppliers of materials or equipment.

The Resident Engineer or the Construction Manager's staff shall report any unsafe working conditions or security vulnerabilities verbally, electronically or via written notice to Metro Construction Safety Staff. The condition shall also be reported to the contractor's Foreman, Safety Representative, and or the Project Manager and/or General Superintendent depending upon the severity of the condition. The contractor shall promptly correct the unsafe working conditions or security vulnerability. All verbal reports shall be included in the Daily Activity Report, Daily Inspection Report or similar daily work record.

The Resident Engineer/Construction Manager has a responsibility to notify the contractor in writing of non-compliance with any of the requirements established in this Construction Safety and Security Manual or Technical Specifications. The Resident Engineer/Construction Manager shall take the following actions:

When notified electronically or in writing of an uncontrolled safety hazard or security vulnerability which the Prime Contractor either cannot or will not immediately resolve, the Resident Engineer/Construction Manager shall notify the Prime Contractors Representative in writing of the condition and the requirement for resolution. Included in this notification will be a description of any work that has been stopped due to the condition. The Resident Engineer/Construction Manager shall require the Prime Contractor to respond within twenty-four (24) hours with a written plan to resolve the condition including a schedule for completion.

Metro Construction Safety through the Resident Engineer/Construction Manager may require the temporary or permanent removal from Project sites any individual(s) who continually or deliberately violates the safety and security requirements of the Contract. An action of this type will come in the form of a Directive from the Director, Construction Safety with the concurrence of the Executive Director, Transit Project Delivery.

6. Contractor

The Construction Safety and Security Manual is a Metro contract document and contractors shall ensure that employees, visitors, subcontractors, and their suppliers/vendors, while on the worksite and in the conduct of work for Metro, comply with the requirements of this document, The California Code of

Regulations Title 8, or Title 29 of the Code of Federal Regulations, whichever is most stringent in regulating the safety conditions to be maintained in the work environment. Determination of the most stringent language or statute will be made by the Director, Construction Safety, or Construction Safety Manager. When there is a conflict in the interpretation of any standard or requirement of this document, Director, Construction Safety, Construction Safety Manager shall be responsible for the final determination of the interpretation to be accepted by all parties.

The contractor recognizes that all government promulgated safety regulations are *minimum standards*. Additional safeguards may be required by Metro or its designee to insure worksite safety and to prevent loss. The contractor is responsible for compliance with the injury prevention, safety and security requirements contained in its contract with Metro and safety and security related submittals. Compliance with the requirements of this paragraph shall be considered within the original scope of work and made without delaying the schedule for performance of work by the contractor, nor serve as the basis of a request for change to increase the cost of the Work or shall it be relied upon to form the basis of any claim.

7. Contractor's Project Manager, Superintendent and or other Supervisory Staff

As a direct representative of the Contractor at the worksite, the Contractor's supervisory and or management staff shall at a minimum:

- a. Support the Lead Safety Representative/Safety Representatives in the discharge of their duties and responsibilities.
- b. Plan and execute the work in accordance with the stated objectives of Metro Construction Safety and Security Program, as stated in 1.3 (Program Objectives).
- c. Take immediate action to correct unsafe, unhealthful or insecure work practices or conditions.
- d. Review and ensure implementation of administrative actions required to complete accurate safety records as specified by Metro construction safety program recordkeeping requirements.
- e. Attend safety meetings as directed by Metro including but not limited to the monthly 'All Hands' safety meeting.
- f. Ensure that appropriate first-aid plans and facilities are established and maintained.
- g. Ensure that subcontractors comply with local, state, Cal/OSHA, and Fed/OSHA regulations, standards, ordinances, Metro Contract requirements, the Contractor's safety program and other rules relating to the safety and security of persons and/or property.
- h. Review and distribute incident investigation reports to ensure timely submission and completeness, and that corrective actions have been completed to prevent recurrence.
- i. Assure that supervisors (both employed by the Prime and any Sub-Contractors) complete thirty (30) hours of job specific safety training before beginning contract related activities. Certification of successful completion of

an accredited OSHA 500 Construction Outreach Course shall satisfy this requirement.

- j. At a minimum, instruction in the following topics shall be included in the thirty (30) hour training:
 - 1) Hazard identification and abatement
 - 2) Preparation of Job Hazard Analyses
 - 3) Communications in Safety
 - 4) Applicable Federal and State Regulations
 - 5) Injury and Incident Investigation
- k. Training certificates and other records shall be submitted to Metro for review and acceptance. Training records shall be maintained at the worksite and made available to Metro for review without prior notice.

8. Contractor's Lead Safety Representative

The Contractor's Lead Safety Representative's performance will be subject to periodic evaluation by Metro Construction Safety Staff. Conclusions and recommendations of the review will be forwarded to the Resident Engineer for information or action. The contractor's Lead Safety Representative or Safety Representatives shall at a minimum:

- a. Document in writing daily safety inspections of the Worksite(s) and public areas contiguous and adjacent thereto and take *necessary* and timely corrective action(s) to eliminate unsafe acts and/or conditions and or security vulnerabilities and document outstanding safety compliance activities or behaviors.
- b. Review incident and investigation reports, to ensure timely submission, and that corrective actions have been completed to prevent recurrence.
- c. Provide foremen and other supervisory personnel with relevant safety and security material for use in conducting weekly tool box safety meetings.
- d. Review safety meeting reports to ensure adequacy of training as well as appropriateness of subject matter.
- e. Conduct incident investigations and preserve incident sites. Prepare and submit the required reports to the RE for final distribution in accordance with the manual.
- f. Develop and implement a safety and security training program for supervisors and employees as applicable to their specific jobs
- g. Develop and implement Safety Incentive Program (SIP) (if included in the Contract Documents) designed to recognize individual contractor/subcontractor employee safety efforts and contributions towards improvement of worksite safety and security.
- h. Attend the Monthly Safety Professionals and Monthly All Hands meetings as held by Metro as well as other meetings as directed by Metro or its designee.
- i. Ensure that employees receive medical treatment for occupational injuries and that a written OSHA 300 log is maintained and available for review by

Metro or designee without prior notice. This Log shall be for all Work completed by the Contractor and Sub-Contractor to the benefit of this Contract regardless of tier, function, or location. Vendors, manufacturers and other entities which do not perform Work at the Work site are excluded.

- j. Ensure that subcontractor employees at any tier comply with jobsite safety rules and regulations and contract requirements; and that the subcontractors' reports are completed in accordance with this manual and according to the requirements of the applicable regulatory agencies.
- k. When the contract involves underground operations within the scope of the Tunnel Safety Orders found in CCR Title 8, the contractor's Lead Safety Representative shall have the following added responsibilities:
 - 1) Provide for control, availability, and use of safety equipment, including employee personal protective equipment. Ensure that equipment used in tunnels or underground work areas requiring approval by the Mine Safety and Health Administration (MSHA) or other certifying agencies is properly approved or certified and that this equipment is maintained in an appropriate manner. When there is a conflict in interpretation, the Director, Construction Safety or Construction Safety Manager shall be responsible for the final interpretation.
 - 2) Ensure that timely and accurate records are kept by Certified Underground Gas Tester(s). Results of gas and ventilation tests will be recorded in the contractor's permanent log immediately following the end of each shift. These records shall contain at a minimum the location, time, tests conducted, and results of tests. These records shall be maintained at the worksite and available for review by Metro without prior notice.
- l. Shall perform or assure the performance of environmental testing on items including, but not limited to: noise, air flow, and air quality. Written records of such tests shall be kept and made available upon request. It is the Lead Safety Representative and or Safety Representative's responsibility to ensure that the contractor complies with pollution and environmental control requirements. This paragraph pertains to environmental control requirements relating to, but not limited to both tunnel construction and confined spaces.
- m. Provide copies of required contractor safety reports, as outlined by Appendix A, Summary of Construction Safety Reports.
- n. Attend scheduled meetings as detailed in this Manual and technical specifications.
- o. Shall supervise other contractor Safety Representatives, gas testers and first-aid personnel assigned to the contract.
- p. Oversee the conduct of weekly safety meetings to be attended by contractor/subcontractor and management personnel. Written records of these meetings shall be maintained at the worksite and made available to Metro upon request without prior notice.
- q. Coordinate and participate in the development of Job Hazard Analyses, ensuring quality and timely submittals. Coordinate training of work crews and line supervision affected by each JHA.

9. Contractor's Safety Representative(s)

The Contractor's Safety Representative's performance will be subject to periodic evaluation by the Contractor's Lead Safety Representative as well as Metro Construction Safety Staff. Conclusions and recommendations of the review will be forwarded to the Resident Engineer for information or action. The Contractor's Safety Representative(s) shall at a minimum:

- a. Document in writing daily safety and security inspections of the Worksite(s) and public areas contiguous and adjacent thereto and take necessary and timely corrective action(s) to eliminate unsafe acts and/or conditions and document outstanding safety compliance activities or behaviors.
- b. Review safety and security meeting reports submitted by foremen to ensure adequacy of training as well as subject matter.
- c. Conduct incident investigations and preserve incident sites. Prepare and submit required reports to the Lead Safety Representative.
- d. Support the safety training program for supervisors and employees as applicable to their specific jobs and as instructed by the Lead Safety Representative.
- e. Ensure that employees receive medical treatment for occupational injuries and that a written OSHA 300 log is maintained.
- f. Ensure that all subcontractor employees at any tier comply with Worksite safety rules and regulations; and that the subcontractors' reports are completed in accordance with the requirements of this section and according to the requirements of the applicable regulatory agencies.
- g. Support the availability and use of safety equipment, including employee personal protective equipment.
- h. Shall perform environmental testing on items including, but not limited to; noise, air flow, and air quality. Written records of such tests shall be kept and made available upon request.
- i. Assist with weekly safety meetings to be attended by all contractor/subcontractor and management personnel.
- j. Coordinate and participate in the development of Job Hazard Analyses, ensuring quality and timely submittals. Coordinate training of work crews and line supervision affected by each JHA.

10. Underground Gas Tester

The Contractor's Underground Gas Tester's performance will be subject to periodic evaluation by the Contractor's Lead Safety Representative as well as Metro Construction Safety Staff. Conclusions and recommendations of the review will be forwarded to the Resident Engineer for information or action. The Contractor's Underground Gas Tester(s) shall at a minimum:

1. Document in writing daily safety inspections of the Worksite(s) and public areas contiguous and adjacent thereto and take necessary and timely corrective action(s) to eliminate unsafe acts and/or conditions and document outstanding safety compliance activities or behaviors.

2. Shall perform environmental testing on items including, but not limited to; air flow and air quality as required by CCR, Title 8. At a minimum, Underground Gas Tester(s) shall have the equipment needed to test for Oxygen first, followed by Carbon Monoxide, Combustible Gases, Hydrogen Sulfide, and Nitrogen Dioxide. Written records of such tests shall be kept and made available upon request. Written records shall include printed copies of regular download of the air quality testing instrument's memory.
3. Maintain air quality and velocity testing equipment in accordance with manufacturer's instructions including unit calibration.

11. Line Supervisor (Forepersons)

Forepersons and other frontline leadership are the key individuals in an effective safety and security program. Their initiative and training toward incident prevention on their daily assignments determine the degree of safety and security which exists on the job.

A foreperson's safety responsibilities include the following as a minimum:

- a. Sets a good example for his/her crew in the matter of safety and security.
- b. Inspection of the assigned job area to ensure that unsafe acts or conditions are identified and corrected. This includes the inspection of tools and or equipment utilized by the foreman's assigned crew regardless of the ownership of the tool or equipment.
- c. Ensures that safety requirements are adhered to and enforced.
- d. Provides and requires the use of proper personal protective equipment and suitable tools for the job.
- e. Ensures that orderliness and good housekeeping are maintained at all times.
- f. Sees that his/her assigned crew is properly instructed in safe work practices when assigned to their job task.
- g. Investigates incidents that affect or involve Work under his/her direct control to determine facts necessary for corrective action.
- h. Promptly completes incident reports as required.
- i. Conducts weekly toolbox safety meetings with personnel to:
 - 1) Discuss unsafe work practices and unsafe or insecure conditions, directing safe and secure alternatives.
 - 2) Review incident experiences with the crew and discuss corrective action(s).
 - 3) Encourage personnel to make safety suggestions and respond appropriately.
- j. Ensure that prompt first-aid is administered when required. Confirm that required first-aid training of crew members is current.
- k. Instruct newly hired personnel with respect to safety and security requirements and job duties.

2 GENERAL SAFETY & SECURITY REQUIREMENTS

2.1 Purpose and Scope

The purpose of this section is to establish minimum safety and security requirements, emergency procedures, and guidelines to protect employees, property and the general public. This section provides basic information to the Contractor on the construction safety and security expectations of Metro. Detailed requirements are also found in the Worksite Safety and Worksite Security Specifications.

2.2 Objectives

To establish minimum standards for the provision of a safe and healthful workplace.

To establish minimum standards for the provision of security and loss prevention on the project properties.

To comply with regulatory safety standards as well as Metro construction safety and security standards.

To establish guidelines for required emergency procedures.

To develop administrative safety and security guidelines for worksite tours.

2.3 Compliance with Safety Requirements

The contractor shall maintain on-site at least one updated copy of the following:

- A. Metro Construction Safety and Security Manual
- B. Cal/OSHA General Industry Safety Orders
- C. Cal/OSHA Construction Safety Orders
- D. Cal/OSHA Tunnel Safety Orders (When Contract Scope of work falls under the jurisdiction of these orders)
- E. Cal/OSHA Electrical Safety Orders (for both low and high voltages)
- F. Work Area Traffic Control Handbook (California MUTCD and or Watch Manual, LADOT)
- G. Flagging Handbook (U.S. Department of Transportation)
- H. California Labor Code
- I. Title 29 CFR 1910 - General Industry Safety Standards
- J. Title 29 CFR 1926 - Construction Safety Standards
- K. Title 30 CFR Chapter 1

These documents shall be considered the property of the contractor and shall be exempt from the requirements of paragraph 1.5.B.4. All items listed above shall be available for review by Metro without prior notice.

In lieu of hard copies of regulatory documents, the contractor may maintain up to date electronic copies. Electronic copies may include, but are not limited to, computer

software versions distributed on CD-ROM or access to editions of these documents which are available via the Internet, provided the contractor's safety staff is equipped with the appropriate computer equipment and Internet access to review these sources at any time. Metro shall maintain the right to test the contractor's safety personnel's knowledge and abilities with regard to accessing these electronic documents and shall retain the right to require the contractor to provide additional computer training to the contractor's safety staff or hard copies as determined by Metro shall be considered part of the original scope of work and shall not delay the schedule for performance of work by the contractor.

2.4 Alternate Safety Coverage Policy

In order to insure uniform safety coverage in situations when the assigned Safety Representative cannot be on the worksite, Metro has established the following Alternate Safety Coverage Policy. This policy allows the contractor to utilize a Designated Safety Representative (DSR) to perform safety duties of the required Lead Safety Representative or Safety Representative during specific periods of absence. The contractor shall comply with all portions of this policy in order to insure the continued effectiveness of the safety program. This procedure does not replace the safety personnel requirements of the contract as specified in the Technical Specifications, but is intended only to provide a method for continued work on the project when the required personnel must be absent for short or unexpected periods of time. For work which falls under the scope of the California Tunnel Safety Orders, this policy does not relieve the Contractor from the requirements for having certain certified personnel at the worksite when workers are underground.

This policy and program provide benefit to the contractor by allowing a method to continue work during an absence of the designated and contractually required Safety Representative. *Without this policy and program, work on the worksite shall be halted when the Approved Safety Representative is not available to perform his/her contractual duties.*

A. GENERAL REQUIREMENTS

1. As a supervisory employee of the Contractor, the DSR shall have the authority to direct immediate correction of unsafe or insecure conditions, and, as necessary, to stop affected work until appropriate corrective measures are completed.
2. After Notice To Proceed (NTP) the contractor shall submit for acceptance a list of candidates for DSR Coverage. This submittal shall include the names of all candidates, their qualifications (including required experience), training records, and required Cal/OSHA and CPR/First Aid certifications for review and acceptance by Metro. Only candidates whose qualifications have been submitted no less than thirty (30) days prior to the request for DSR coverage shall be eligible for consideration to provide the specified coverage. Changes in the list of candidates shall be submitted as needed by the Contractor.
3. Designated Safety Representatives shall not substitute for personnel required by the Technical Specifications of this Contract in any situation other than those specifically described below and for no longer than the time periods indicated.
4. Requests for Alternate Safety Coverage must be accompanied by current copies of certification cards for certifications required by this policy if the certifications have been renewed since their first submittal. This request shall be processed

and transmitted in the manner of any other contractor submittal in accordance with the requirements of this manual and the Contract.

5. The Request for Alternate Safety Coverage shall be submitted no less than forty-eight (48) hours prior to the commencement of the covered work. Any request submitted without this required processing time shall be rejected. Requests to cover extended (greater than one shift) sick leaves, terminations for cause and/or resignations without prior notice are exempted from this requirement.
6. The Request for Alternate Safety Coverage shall include the following information:
 - a. Clear indication of the reason for coverage.
 - b. A clear description of the location(s) of the covered work.
 - c. A clear description of the scope of the covered work.
 - d. Size of the work crew(s) to be covered.
 - e. Identification of all responsible personnel to be on duty during the specific period.
7. The RE shall provide a copy of each Request for Alternate Safety Coverage Submittal to the Metro Construction Safety Manager or designee who may, upon review, require the submittal of a job hazard analysis prior to the approval of the Request for Alternate Safety Coverage and the start of any covered work.

If required as a condition of approval of the Request for Safety Coverage, the contractor shall submit and have approved by Metro's Construction Safety Manager or designee a job hazard analysis of the work.
8. The submitted Request for Alternate Safety Coverage submittal will be approved only for individuals who have been previously submitted and approved by Metro in conformance with paragraph 2.4.A.2.
9. Should the Contractor fail to comply with the requirements of this policy for any work covered by a Request for Alternate Safety Coverage or fail to submit a Request and allow work to be performed without required safety coverage, Metro will issue a **SUSPENSION OF WORK NOTICE** for the work involved. The **SUSPENSION OF WORK NOTICE** shall remain in effect until the contractor returns to compliance with the safety coverage requirements of the Contract and this section.
10. At the discretion and direction of the Director, Construction Safety, a **SUSPENSION OF WORK NOTICE** may be issued for all or part of the Work being performed on the Project with regard to Alternate Safety Coverage based upon a variety of factors including but not limited to, the Contractor's prior level of cooperation, effectiveness of Contractor's Safety Program, and reason for non-compliance with the requirements of this program.

B. REVOCATION

The contractor's utilization of this policy may be revoked by the Metro Director, Construction Safety or Construction Safety Manager at any time by notifying the RE and Contractor in writing of the revocation including the rationale for the revocation and curative measures (if any) the Contractor must undertake to again be eligible to participate in the benefits of this policy.

Upon written notification from the Metro Director, Construction Safety or Construction Safety Manager that this policy has been revoked, the Contractor shall comply with the staffing requirements found in the technical specifications when work is proceeding regardless of the type of work or the size of the crew involved in the work.

This Alternate Safety Coverage policy may be revoked for cause. Potential causal rationales include but are not limited to:

1. Poor contractor Safety Performance
 - a. Project-to-Date or successive monthly Lost Time Injury Rates in excess of the most recently published national average or the Project-to-Date Rate.
 - b. Project-to-Date or successive monthly Recordable Injury Rates in excess of the most recently published national average or the Project-to-Date Rate.
2. Documented non-compliance with the requirements of this policy.
3. Documented non-compliance with the safety and security requirements of this contract.

Revocation of this policy may be limited to a particular time period or be for the life of the contract as deemed appropriate by the Metro Director, Construction Safety or Construction Safety Manager.

C. QUALIFICATIONS

To be accepted by Metro, a candidate for Designated Safety Representative shall satisfy the following requirements:

1. Satisfactorily completed the OSHA 30 Hour Construction Safety Training Course "Occupational Safety and Health Standards for the Construction Industry."
2. Be a foreman, superintendent or other supervisory member of the contractor Project Management Team currently assigned to the Work.
3. When requested, demonstrate familiarity with all reporting and recordkeeping requirements for which the DSR will be responsible.
4. If the candidate has previously served as a DSR, the candidate shall have performed the duties of DSR to the satisfaction of the Metro Construction Safety Manager assigned to the Project.
5. Possess at least one year of verifiable supervisory experience in the Heavy Construction field, specifically in the scope of work of the request.

D. USE OF A DSR

The contractor may utilize this policy in the following situations and only in accordance with the requirements of this policy:

1. Sick, Personal or Emergency Leave
 - a. The contractor shall inform the Resident Engineer immediately upon the absence of the designated Lead Safety Representative or Safety Representative and provide a copy of the Alternate Safety Coverage Request

(Form DSR-1) indicating the qualified person who will act as DSR during the absence.

- b. If the sick, personal or emergency leave will extend more than fourteen (14) calendar days, the contractor shall provide a qualified Lead Safety Representative/Safety Representative, acceptable to Metro and meeting the requirements of the Technical Specifications of this Contract to assume the duties and responsibilities of the absent Lead Safety Representative/Safety Representative on or before the fifteenth day of absence.

2. Vacation Leave

- a. The contractor shall provide a copy of the Alternate Safety Coverage Request (Form DSR-1) indicating the qualified person who will act as DSR during the absence no less than one week prior to the planned absence.
- b. If the vacation will extend more than fourteen (14) calendar days, the contractor shall provide a qualified Lead Safety Representative/Safety Representative, acceptable to the authority and meeting the requirements of the Technical Specifications of this Contract to assume the duties and responsibilities of the absent Lead Safety Representative/Safety Representative on or before the fifteenth day of absence.

3. Lead Safety Representative/Safety Representative Termination or Resignation

- a. In the event that a contractor Lead Safety Representative/Safety Representative is either terminated or resigns, the contractor shall immediately inform the Resident Engineer and the Metro Construction Safety Manager or designee.
- b. The contractor shall assign a DSR immediately and provide the Resident Engineer and the Metro Construction Safety Manager or designee a copy of the Alternate Safety Coverage Request indicating the DSR candidate.
- c. If the substitution of a DSR extends more than fourteen (14) calendar days, the contractor shall provide a qualified Lead Safety Representative/Safety Representative, acceptable to Metro and meeting the requirements of the Technical Specifications of this Contract to assume the duties and responsibilities of the former Lead Safety Representative/Safety Representative on or before the fifteenth day of absence.

4. Small Work Crews

In situations where a small crew of fifteen (15) employees or less, including all supervisory and subcontractor employees, is involved in work on an extended shift, weekend work or irregular shift work; a DSR may be substituted for the personnel required by the Technical Specifications provided the following conditions are met:

- a. For Projects that involve multiple Contracts with Prime Contractors, the individual Contract's Project to Date OSHA Recordable Case Rate must not exceed the overall Project's Case Rate.
- b. For Projects that involve multiple Contracts with Prime Contractors, the individual Contract's Project to Date Time Away From Work Case Rate must not exceed the overall Project's Case Rate.

- c. For Projects that involve a single Contract with a Prime Contractor or JV, the Contractor's Project to Date OSHA Recordable Case Rate and Lost Time Case Rate must not exceed the most recently published National Rates.
 - d. The contractor shall provide a copy of the Safety Coverage Request (Form DSR-1) indicating the qualified person who will act as DSR during the work no less than four working days prior to the planned work.
5. Work Activity at Contract Completion

As the Contract nears completion and the only remaining contractor activity is limited to work by small crews on an irregular basis, acceptance of the use of a DSR for the work will be considered by the Metro Construction Safety Manager or designee based upon the detail of the particular situation.

2.5 Required Emergency Procedures

A. EMERGENCY ACTION PLAN & REPORTING PROCEDURES

The contractor shall have a written Emergency Action Plan & Reporting Procedure including, but not limited to, the following:

1. Injuries to employees.
2. Injuries to the general public on or adjacent to the worksite.
3. Property damage with particular emphasis on utilities.
4. Fire.
5. Natural disasters such as earthquakes.
6. Public demonstrations such as mobs, riots, etc.
7. Bombs or other destructive threats.
8. Other exposures or potential hazards that may occur at the worksite.
9. Ventilation for underground work areas.
10. Emergency procedures compatible with local police and fire department procedures.
11. Emergency procedures that ensure the contractor's most senior supervisor present takes charge of and directs the handling of the emergency.

The contractor's Lead Safety Representative/Safety Representative shall review emergency procedures monthly to ensure that contractor personnel are familiar with the proper actions to take, and that emergency telephone numbers are current. The emergency procedures shall be posted on the contractor's bulletin board. All emergency procedures shall be reviewed and accepted by Metro. Emergency fire and earthquake drills will be conducted semi-annually during the term of the contract.

After NTP and prior to the start of construction activities (including activities in support of Final Design for Design Build Contracts), the above procedures shall be submitted to Metro for review and approval in compliance with Section 1.05 of the Worksite Safety Requirements.

The Emergency Reporting Procedure and specific emergency procedures will be discussed and reviewed regularly by the contractor's supervisory personnel and at tool box safety meetings.

B. EMERGENCY ACTION PLAN & REPORTING PROCEDURE IMPLEMENTATION

Should an emergency occur, the contractor shall:

1. Immediately secure the area and implement the appropriate actions from the Emergency Action Plan & Reporting Procedure.
2. Notify the Resident Engineer and the Metro Construction Safety Manager or designee who will notify other Metro staff in conformance with Metro's Emergency Action Plan & Reporting Procedure.
3. Provide information regarding the emergency to authorized Metro representatives only. Questions from the press and media shall be referred to Metro's Public Affairs Department.

C. FIRST-AID FACILITIES

In formulating a Site Specific Emergency Action Plan, the contractor shall provide appropriate facilities and staff for the treatment of on-the-job injuries. The first-aid facility shall comply with the requirements of the CCR Title 8 in conforming to the following:

1. For larger Heavy Civil and or New Underground Construction Projects where the Contractor maintains a portable or temporary office at the worksite, the location, size, furnishing and equipment shall have the approval of Metro and be capable of providing quiet, private communications, as well as adequate ventilation, light, heat, hot and cold water, toilet facilities and electrical outlets. Additionally, this station must also be equipped with a first-aid kit suitable to service the number of personnel assigned to the project, towels and paper cups, a blood pressure cuff and stethoscope, a cot or an equivalent resting place, and other items as required by the consulting physician.
2. For small Capital Improvement Construction Projects where the Contractor *does not* maintain a portable or temporary office at the worksite, the location, size, furnishing and equipment shall have the approval of Metro and be capable of providing quiet, private communications, and may be nothing more than the cab of a Company Truck. This station must also be equipped with a first-aid kit suitable to service the number of personnel assigned to the project, and other items as required by the consulting physician.

D. INCIDENTS

Incidents involving either personal injury, serious or significant property damage (in excess of \$5,000) or a report to the '9-1-1' agency shall be reported by the Contractor's Safety Representative immediately to the Metro Construction Safety Manager or designee. The Metro Construction Safety Manager or designee shall notify Metro staff in conformance with the Metro Emergency Reporting Procedures. The Contractor shall issue standing orders to all supervisors directly in charge of operations that the scene of an incident shall not be

disturbed, except for rescue or other emergency measures, until otherwise directed by the Metro Construction Safety Manager or designee.

The Contractor's Safety Representative shall report 'near miss' or non-serious property damage incidents to the Metro Construction Safety Manager or designee immediately. If the incident falls below the reporting criteria for activating the Emergency Reporting Procedures the Metro Construction Safety Manager or designee will follow Metro procedures and make notifications as needed.

Contractors' personnel, either witnessing or party to the incident, shall be detained at the site to provide detailed accounting of facts in the form of a written, signed statement. All statements as well as a preliminary investigation into the facts conducted by contractor management personnel including drawings and pictures shall be submitted to the Metro Construction Safety Manager or designee within 24 hours of the incident. The contractor shall designate a responsible person to make emergency calls.

2.6 Protection of the Public

A. PROTECTIVE MEASURES

Necessary precautions shall be taken to prevent injury to the public or damage to property of others. Installation of temporary barriers and/or fencing designated to protect the public shall be reviewed and accepted by Metro and monitored for compliance by the Metro Construction Safety. Precautions shall include but not be limited to the following:

1. Work shall not be performed in any area occupied by the public unless specifically permitted by the contract or approved in writing by Metro.
2. When necessary to maintain public use of work areas involving sidewalks, entrances to buildings, lobbies, corridors, aisles, stairways, vehicular roadways, etc., the contractor shall protect the public in accordance with all applicable laws and regulations.
3. Sidewalks, entrances to buildings, lobbies, corridors, aisles, doors or exits shall be kept clear of obstructions to permit safe ingress and egress of the public at all times.
4. Appropriate warnings, signs and instructional safety signs shall be conspicuously posted where necessary. In addition, a signal person shall control the movement of motorized equipment in areas where the public might be endangered. Signs, signals or other control devices used to regulate vehicular traffic shall meet the requirements of paragraph 1.5.B of this document, and the Work Area Traffic Control Handbook (known as the "Watch Manual") or California Manual on Uniform Traffic Control Devices (MUTCD).
5. Sidewalks, sheds, canopies, catch platforms and appropriate fences shall be provided when necessary to maintain public pedestrian traffic adjacent to the erection, demolition or structural alteration of outside walls on any structure. The protection required shall be in accordance with all applicable laws and regulations and paragraph 1.5.B of this document.

6. Temporary fencing shall be provided around the perimeter of the worksite adjacent to public areas except where a sidewalk shed or fence is provided by the contractor as required by subparagraph 5, above. Perimeter fences shall be at least eight feet high.
7. Temporary fencing may be constructed of wood or metal frame and sheathing, chain link, a combination of both, or as otherwise provided in contract documents. To address line of sight issues, when the fence is adjacent to a sidewalk at a street intersection or driveway, the upper portion of fence shall be open wire mesh from a point not to exceed three feet above the sidewalk and extending at least twenty-five feet in both directions from the corner of the fence.
8. Guardrails shall be provided on both sides of vehicular and pedestrian bridges, ramps, runways and platforms. Pedestrian walkways elevated adjoining surfaces, or walkways within four feet of the top of excavated slopes or vertical banks, shall be protected with guardrails, except where sidewalk sheds or fences are provided as required by subparagraph 6, above. Guardrails shall be constructed in accordance with paragraph 1.5.B, of this document.
9. Barricades shall be provided between work areas and pedestrian walkways, roadways or occupied buildings unless more specific protection is required in the paragraphs above. When a barricade is temporarily removed for the purpose of work, an employee shall be assigned to monitor the openings to prevent injury or damage to the public.
10. Temporary sidewalks shall be provided when a permanent sidewalk is obstructed by the contractor's operations. Guardrails shall be provided on both sides of temporary sidewalks.
11. Warning signs, reflective stripes or tape, and lights shall be maintained along guardrails, barricades, temporary sidewalks and at every obstruction to the public. Lights shall be placed at both ends of such protection or obstructions and not over twenty feet apart alongside of such protection or obstruction where pedestrians are expected to travel along the path.
12. The use of fuel burning type lanterns, torches, flares or other open flame devices is prohibited.

2.7 Group Tours and Site Visitors

A. CONDUCT OF TOURS

It is particularly important that a high degree of protection be afforded persons on authorized tours of construction worksites. The following instructions shall be complied with, as applicable, by the contractor and those responsible for arranging such tours:

1. In all cases, Metro shall advise the Contractor of any tour being hosted by Metro in a timely manner prior to the tour taking place.
2. Tours hosted by the Contractor must be cleared through the Metro Department of Public Affairs, as well as the Project Director or designee, allowing maximum advance notice and in compliance with Metro's Policies and Procedures.
3. Metro Public Affairs will coordinate the tour arrangements and ensure notification of the Construction Manager.

4. Metro Public Affairs will coordinate the following with the individual or organization requesting the tour:
 - a. Number of Visitors - Tour groups in non-work areas will be limited to no more than twenty-five persons per tour guide. Tour groups in work areas will be limited by agreement between Construction Safety and Public Affairs based upon the specific conditions to be encountered by the tour group.
 - b. Clothing - Visitors entering the work areas of the Project (regardless of whether construction work is taking place in the area or not) will be required to wear appropriate work pants, shirts, and sturdy leather work shoes or rubber safety toed boots. Sneakers, high-heeled shoes, light weight hiking footwear, steel toed athletic or casual footwear are prohibited. Dress or suit slacks or pants, dress shirts or blouses and suit coats will be highly discouraged due to the potential for damage. Loose fitting clothing of any type or clothing that does not protect the legs from scratches and abrasions is also prohibited.
 - c. Minors - Persons under 18 years of age are not permitted on project tours.
 - d. Protective Equipment - Hard hats, eye protection, ear-plugs, and other personal protective equipment will be required as necessary. Metro Public Affairs shall provide protective equipment in coordination with the Director, Construction Safety or designee for tours hosted by Metro only.
 - e. Release and Hold Harmless Agreement - Each visitor shall be required to sign a release and hold harmless agreement prior to the commencement of the tour. A sample Visitor's Release and Hold Harmless Agreement is contained in this manual as Exhibit 2-1.
 - f. Visitors shall comply with contractor safety requirements. This includes Self Rescuer training prior to entering an underground station or tunnel.
 - g. Metro Construction staff members and tour guides shall familiarize their group(s) with the hazards to be encountered on the tour as well as how to protect themselves from these hazards prior to entering the work site through a pre-tour safety orientation presentation.

2.8 Locating Utilities

A. REQUIREMENTS

Prior to any underground work being performed, utilities within the area of work shall be located in accordance with the California Government Code.

1. The contractor shall contact the Underground Service Alert (USA) of Southern California via telephone at 1-800-422-4133 or 8-1-1 or via the internet at www.digalert.org, to arrange for the utilities within the area of work to be located.
2. The construction project specifications and drawings shall be reviewed by the contractor for notations of utility companies that are not a member of an underground service alert group. Those non-members of an underground service alert group must be contacted directly.
3. Contact with Underground Service Alert or utility companies shall be logged on the Underground Service Alert Contact Log and retained by the contractor. This

log shall be maintained at the primary worksite and made available to Metro for review without prior notice. See Exhibit 2-2.

4. The contractor shall visually check the area for signs indicating the possibility of recent underground relocation work by an outside entity.
5. The contractor shall notify the RE and staff at the periodic look ahead and/or readiness review meetings as to any upcoming underground work expected during the look ahead time period.
6. The contractor shall take all necessary steps to protect the utilities from damage including 'pot-holing' at appropriate intervals to positively locate the utilities. Confirm with the Metro Third Party staff and or directly with the owners of underground utilities in the area to confirm the need for a representative of the utility to be on location during the work. If the Utility requires the presence of a representative, work with the potential to affect that utility installation shall not be commenced without the required representative present.
7. Strict compliance with the utility provisions of this manual as determined by Metro shall be considered part of the original scope of work and shall not delay the schedule for performance of work by the contractor nor shall they be the basis for any claim of delay or to increase the cost of the Contract.

2.9 Concrete Barricades

Temporary concrete barricades, such as "K-rail" or "Jersey barricades", shall be used along streets where work is being performed to separate vehicular traffic from the work areas. Temporary concrete barricades shall be used along streets to separate vehicular traffic from pedestrian detours in streets. These barricade installations shall be designed and installed in compliance with the provisions of this Contract and the most recent revision of the California Manual of Uniform Traffic Control Devices (CA-MUTCD).

A chain-link fence, or its equivalent, at least four feet in height shall be installed on top of the concrete barricades to prevent pedestrians from climbing or jumping over the barricades. *Plastic type fencing (snow fence) shall not be permitted on the project for this use.* This requirement may be waived by Metro Director, Construction Safety or the Construction Safety Manager for specific locations or periods of work when the fencing or concrete barricades are impractical or inappropriate and other means of protecting the workers and public can be utilized by the Contractor. Waivers shall be in writing and not only have the approval of the Director, Construction Safety or the Construction Safety Manager, but shall also be approved by any other Authority Having Jurisdiction.

2.10 Office Safety and Security

Offices are comparatively safe places to work, however incidents and injuries do occur. To ensure safety of all personnel, follow these rules:

- a. Walk; do not run in corridors or on stairs. Use hand rails.
- b. Do not stand in front of closed doors - they may open suddenly.
- c. Do not read correspondence or other material while walking.
- d. Do not push or crowd at elevators, entrances, exits, or on stairways.
- e. Be careful of swivel chairs. Do not lean back in them without testing your weight gradually.

- f. Electrical or telephone cords shall not be placed across aisles or doorways unless properly protected.
- g. Use handles when closing files, desk drawers and safe or vault doors.
- h. Keep file drawers, desk drawers and locker doors closed when not in use. Open only one file or desk drawer at a time. File cabinets and bookcases shall be properly secured to prevent overturning.
- i. Check your office furniture regularly to assess safe conditions.
- j. Familiarize yourself with emergency office procedures for fire, earthquakes and bomb threats.

EXHIBIT 2-1

VISITOR'S RELEASE AND HOLD HARMLESS AGREEMENT

Contractor: _____

Contract No: _____ Date: _____

In consideration of being permitted, for my own purposes and interests, to enter upon the premises or construction site of the Metro Transit Project, I hereby release, hold harmless, and indemnify Metro, the construction managers, contractors and subcontractors from and against, and assume the risk, for and on behalf of myself, my heirs, my survivors and my estate, for any damages, losses, injuries and any and all other claims of any type whatsoever for personal injury (including death) and other loss or damage of any nature whatsoever including damage to my personal property, sustained or caused while on such premises or site, except those injuries which are caused solely by the negligence of Metro, the construction managers, contractors, subcontractors or its agents or employees. In the event any clause, term or provision of this agreement shall be declared or adjudicated void or invalid, it shall in no manner affect the other clauses, terms and provisions hereof, which shall remain in full force and effect, as if the clause, term or provision so declared or adjudicated invalid was not originally a part hereof.

Print Name: _____

Signature: _____

Address: _____

Date: _____

EXHIBIT 2-3

ALTERNATE SAFETY COVERAGE REQUEST (FORM DSR-1)

Contract No: _____ Date: _____

Contractor: _____

LEAD SAFETY REPRESENTATIVE/SAFETY REPRESENTATIVE COVERAGE SITUATION:

- | | | |
|--|---|-------------------------------------|
| <input type="checkbox"/> Vacation | <input type="checkbox"/> Personal Leave | <input type="checkbox"/> Sick Leave |
| <input type="checkbox"/> Termination | <input type="checkbox"/> Resignation | <input type="checkbox"/> Other |
| <input type="checkbox"/> Small Crew Coverage | <input type="checkbox"/> End of Contract Coverage | |

Coverage Situation Details: _____

Detailed Scope of Operation(s) to be covered: _____

Coverage Start Date: _____ Expected End Date: _____ Time of Day: _____

Individual Coverage is being requested for: _____
(name)

Designated Safety Representative Nominee: _____
(name)

Designated First Aid Responder: _____
(name)

Designated CPR Responder: _____
(name)

Assigned Certified Tunnel Safety Representative: _____
(if required by work scope) (name)

Assigned Certified Gas Tester: _____
(if required by work scope) (name)

Complete and submit this form in compliance with Section 2.4 of this Manual.

3 INSTRUCTION AND TRAINING

3.1 Purpose and Scope

To establish minimum requirements for safety and security training and instruction activities required of every contractor while under contract with Metro. This training should begin with Notice to Proceed and continue through Substantial Completion and Punch List work.

3.2 Objectives

To ensure that all personnel trained in the awareness of safety hazards and security vulnerabilities involved in their specific job assignments.

To ensure contractors are in compliance with all the specific requirements of paragraph 1.5.B.

3.3 Basic Elements

The following areas of safety instruction and communication will satisfy the statutory as well as Metro requirements:

- A. Safety, Health and Security indoctrination
- B. Work assignments and job hazard analyses
- C. Safety meetings (including security topics); general, toolbox and task training
- D. Job specific instruction
- E. Location awareness (for security vulnerabilities)
- F. Promotional materials
- G. Supervisor safety and security training
- H. OSHA 30-hour construction safety training
- I. Safety incentives

3.4 Procedures

A. INDOCTRINATION

Newly employed, promoted and/or transferred personnel shall be fully instructed in the safety and security practices required for their assignments by audio/visual means including but not limited to video tape presentations, computer interactive training, instructor presentations and or a combination of methods. Initial instructions for project personnel shall include, but not be limited to, instruction on the following:

1. For each individual, the safety hazards and security vulnerabilities presented by the specific work assignment and in the general work area.
2. Personal protective equipment required to be worn at all times in the project work areas including but not limited to hard hat, safety eyewear, and contract compliant clothing and footwear.

3. Instructions on the proper procedure for reporting unsafe job conditions or security vulnerabilities that may be encountered.
4. Reporting of any and all injuries or illnesses, collisions and or damage to public, project or Contractor equipment or property, including near misses.
5. Contractor's job rules and Injury-Illness Prevention Program (IIPP) for the job.
6. Location of first-aid and medical facilities.
7. Toolbox safety/security meeting requirements.
8. Emergency service notification procedures for fires, medical emergencies, police services or other emergency situations.
9. An orientation by the foreman, superintendent or other supervisor of the new employee's work area to the specific safety hazards and security vulnerabilities of that area.

A. WORK ASSIGNMENTS

Work assignments, regardless of level, shall include specific instructions on safety and security. Supervisors shall monitor under actual working conditions to ensure that all safety and security instructions are being followed.

B. MEETINGS

Properly conducted safety meetings of substantive length are an effective means of communicating with employees about safety and security topics. To be effective, the material presented must be specific as well as practical.

1. Crew Training Meeting (Toolbox) - Each foreman shall hold a weekly toolbox safety training meeting in the work area with their entire crew. Subject matter should cover specific safety or security procedures pertinent to the crew's on-going activity. Following these meetings, a "Report of Safety Meeting" Form No. CS-49 (Exhibit 3-1) (or approved Contractor equivalent) shall be completed and distributed in accordance with Appendix A, Summary of Construction Safety and Security Reports. The Contractor's Lead Safety Representative/Safety Representative shall regularly attend and participate in these meetings.
2. Operational or Progress Meetings - Safety shall be the first agenda item. The record of these meetings should reflect the specific items discussed. The contractor's Lead Safety Representative/Safety Representative is required to attend. Operational or Progress Meetings shall be held in compliance with the Contract Meetings Specification of this Contract.

EXHIBIT 3-1a



REPORT OF TAILGATE SAFETY MEETING
DATE:
MTA CONTRACT NO:
PROJECT:
CONTRACTOR:
CRAFT:
NO. ATTENDING:
SAFETY AND/OR SECURITY TOPICS DISCUSSED:
SUGGESTIONS FOR IMPROVEMENT:
FOREMAN'S SIGNATURE:
SUPERINTENDENT:
SAFETY REPRESENTATIVE:

FORM NO. CS-49 (front)

EXHIBIT 3-1b

ATTENDANCE ROSTER		
NAME - PRINTED	SIGNATURE	CRAFT
1.		
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FORM NO. CS-49 (back)

4 WORK PRACTICES CONTROL

4.1 Purpose and Scope

This section describes certain basic practices and procedures to be followed by contractors and their subcontractors for the control and elimination of unsafe or insecure practices by employees, during the prosecution of Metro work. Control and elimination of unsafe and insecure acts is a major portion of an effective safety and security program.

4.2 Objectives

Eliminate job-related injuries and illnesses.

Provide a safe and secure work environment.

Ensure protection of the general public and the environment.

Protect construction supplies, equipment and in process facilities.

Eliminate overall losses and claims.

4.3 Procedures

The techniques which may be applied by the contractor in the control of unsafe and insecure acts include but are not limited to:

A. Planning

Controlling unsafe or insecure acts starts with the Contractor's planning of the work including planning for proper equipment, tools, personal protective equipment and employee training. This planning process is incorporated into the Construction Work Plan/Job Hazard Analysis process. This process is fully discussed in Section 5 – Physical Conditions Control, however, the process is integral to controlling both physical and behavioral hazards and vulnerabilities.

B. Supervisory Controls

1. Contractor - Each contractor shall be responsible for continuous surveillance of their operations in order to eliminate the sources of injuries or losses due to unsafe or insecure acts or procedures.
2. Contractor Supervision Staff - The practical safety experience of project supervision shall be utilized in managing the actions of those under their direction.
3. Never, under any circumstance, will an employee be assigned to perform work alone in an isolated work area. Employees working alone must be within visual contact of other workers and or supervision.

C. Reporting of Identified Unsafe or Insecure Practices or Hazardous Conditions

Responsibility for monitoring and recording the safety and security compliance of contractors is located with Metro Construction Safety Staff and the Construction Manager's field staff. Contractor supervision will be notified verbally at the time an unsafe or insecure practice or condition is discovered or noted by Metro or other

staff. Contractor supervision will be expected to take immediate corrective action appropriate to the practice or condition noted. When correction is not immediately possible, written documentation may be directed to the Contractor by Metro Staff to facilitate follow-up. The lack of notification of the contractor by Metro Staff or Construction Manager's staff regarding a specific practice or hazard shall not in any way relieve the contractor of the responsibility and obligation to identify and address unsafe and or insecure conditions or practices.

The Contractor's Safety Representative, Metro Construction Safety Staff and other Construction Management Staff will use forms appropriate to their position and assignments to record observations and feedback of both safe and unsafe behaviors and conditions. Construction Inspectors and other construction professionals under the control of the Resident Engineer shall inform the contractor and Metro Construction Safety of any unsafe or insecure practices or conditions recognized or brought to their attention by recording such information in their daily inspection or activity reports and forwarding copies of these reports to the Construction Safety Manager when needed.

D. Substance Abuse

1. Metro is committed to the establishment and maintenance of a safe and efficient work environment for all personnel, free from the intoxicating effects of alcohol, illegal drugs and other controlled substances.
2. The contractor and subcontractors, regardless of tier, suppliers and all other persons performing work on Metro property shall comply with the provisions of the Construction Contractor Alcohol and Drug Free Workplace Program found in section 4.3.F of this Manual.

E. Other Controlled Items

Metro prohibits the use, possession, concealment, transportation, promotion or sale of the following controlled items:

1. Firearms, weapons, and ammunition - except when possessed by authorized security professional or law enforcement personnel assigned or responding to the Work Site.
2. Switchblades or other illegal knives.
3. Unauthorized explosives including fireworks.
4. Stolen property or contraband.

The use, possession, concealment, transportation, promotion or sale of the above items will result in the involvement of law enforcement personnel. Prosecution of personnel will be at the discretion of the Authority Having Jurisdiction.

F. Alcohol And Drug Free Construction Workplace Program

The Contractor and any Subcontractors of any tier with subcontracts exceeding twenty-five thousand dollars (\$25,000) are subject to these requirements. At the time of execution of the Contract, the Contractor shall submit to Metro an Alcohol and Drug-Free Construction Workplace Program which at a minimum shall include the following:

- 1) An alcohol and drug-free construction workplace policy statement notifying its employees and subcontractor employees that the unlawful manufacture, distribution, dispensing, possession, or use of alcohol or a controlled substance is prohibited in the Contractor's construction workplace and specifying the actions that will be taken against employees for violation of such prohibition.
- 2) Establishment of an on-going alcohol and drug-free awareness program to inform its employees about:
 - a) The Contractor's policy of maintaining an alcohol and drug-free construction workplace.
 - b) The dangers of alcohol and drug abuse in the construction workplace.
 - c) Any available alcohol and drug counseling, rehabilitation, and employee assistance programs.
 - d) The penalties that may be imposed upon an employee for alcohol and drug abuse violations occurring in the construction workplace.
- 3) Provide to all employees engaged in the performance of the Contract a copy of the alcohol and drug free policy statement.
- 4) As a condition of initial employment or re-employment of any Contractor's employee, employment shall be conditional until pre-employment drug screening has been passed. Drug test types shall be performed according to current national standards by a certified laboratory or certified "instant" test device(s).
 - a) "Initial employment" means the date the employee begins work on the Metro Project for a Contractor subject to this Contract.
 - b) "Re-employment" means the date the employee begins a second or more period of work on the Metro Project for a Contractor subject to this Contract after a period away from the Work of more than forty-five (45) days.
- 5) Notification to all employees, in writing, that as a condition of employment the employee will:
 - a) Abide by the terms of the policy statement.
 - b) Upon request by the Contractor, agree to submit to a drug screening/alcohol test if either of the following exists:
 - i. Reasonable suspicion exists to believe the employee is under the influence or possession of drugs, alcohol or other controlled substances; or
 - ii. Employee is involved in an incident or situation that results in an injury to the employee or any other individual during the performance of the employee's assigned duties or property damage.

Drug test types shall be performed according to current national

standards by a certified laboratory or certified "instant" test device(s).

- c) Notify the employer, in writing, of the employee's conviction under a criminal drug statute for a violation occurring in the construction workplace no later than five (5) calendar days after such conviction.
 - d) Notify the employer of employee's use of prescription drugs which may impair alertness during the performance of the employee's assigned duties.
 - e) Upon reasonable suspicion of a violation of policy, submit to a search and inspection upon entering, while working or leaving the Work Site.
 - f) Upon returning to active employment from rehabilitation for alcohol or drug abuse, sign a "Return to Work Agreement", agreeing to unannounced testing for a period of one (1) year, maintaining an acceptable attendance and performance record and participation in follow-up treatment/counseling recommendations by the treatment program.
 - g) Permit the notification of the Metro's contracting officer by the contractor, in writing, within ten (10) calendar days after receiving notice from an employee or otherwise receiving actual notice of an employee's conviction under a criminal drug statute for a violation occurring in the construction workplace. The notice shall include the name and position title of the employee.
 - h) Understand that within thirty (30) calendar days after receiving notice of a conviction, the employer shall take one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the construction workplace.
 - i. Taking appropriate personnel action against such employee up to and including termination, or
 - ii. Requiring such employees to satisfactorily participate in a drug abuse assistance or rehabilitation program approved by a Federal, State or local health, law enforcement or other appropriate agency.
 - i) That the employer will provide, throughout the construction period, periodic seminars and instruction to site superintendents, supervisory personnel including foremen and other key employees in the characteristics, behavior and detection of alcohol and drugs.
 - j) That the employer is required by contract to submit, on a monthly basis, certain anonymous information regarding the number of new employees, number of retested employees, and billing or inventory invoices as well as other information that allows Metro to audit the activities of the Contractor in compliance with the Alcohol and Drug Free Construction Workplace Program.
- 6) The Contractor, if an individual, agrees by award of the Contract, not to engage in the unlawful manufacture, dispensing, possession, or use of a controlled substance in the performance of the Contract.

- 7) If the Contract involves the use of Union Craft personnel in performing the Work, the Contractor may wish to obtain a Memorandum of Understanding regarding its Alcohol and Drug-Free Construction workplace program from the Unions involved.
- 8) The Program shall also contain an explanation of a monthly submittal to Metro which allows Metro to validate the ongoing nature and effectiveness of the Program. This submittal may tag the form of one of the three following reports or another of similar nature as determined by the Contractor and included in the Approved Program:
 - a. A copy of invoices paid to an independent laboratory for the conducting of screening tests. The report should indicate the number of new employees tested, employee retests and tests for cause. This number should equal the number of tests the Contractor is being billed for. Any personal information included on the invoices shall be redacted by the Contractor prior to submittal.
 - b. When the contractor is using a urinalysis device that allows for testing on site, verification of testing is completed via an inventory report. The report should indicate the number of unused testing cups at the beginning of the month, subtracting the number of new employees tested, employee retests, tests for cause, and adding the number of new cups received. This number should equal the number of test cups on site at the end of the month.
 - c. When the contractor is using some other device that allows for testing on site (such as an oral swab), verification of testing is completed via an inventory report. The report should indicate the number of unused testing devices at the beginning of the month, subtracting the number of new employees tested, employee retests, tests for cause, and adding the number of new devices received. This number should equal the number of testing devices on site at the end of the month.

G. Safety First Incentive Program

1. General

- a) Application – This Section and the Program it describes applies ONLY to those Contract Packages where a defined value for this Program is indicated in the Special Provision titled SAFETY’S FIRST INCENTIVE PROGRAM. In Contract Packages where the above titled Special Provision is excluded, blank or marked with the words “Not Used” or similar language, the requirements of this section are null and void.
- b) Purpose. -- This Section will provide guidelines for the Contractor to develop a Safety’s 1st Award Program (Program) to recognize and provide incentive to its personnel at all levels of employment, as well as the of its Subcontractors, for superior safety performance. Metro will reimburse the Contractor the actual cost of the awards, as set forth below, associated with this Program.
- c) Announcement/Presentation. -- The Program status may be reviewed at Metro’s Monthly Safety Meeting. Actual presentation of awards will be made in a convenient area on or near the Worksite.
- d) Approval & Audit. -- To ensure that awards are distributed fairly and consistently, Contractor’s Safety 1st Incentive Program shall be subject to Review and Approval, as well as audit, by Metro.

2. Metro Funding Cap, Reimbursement & Audit.
 - a) Funding Cap. -- This Program will be funded under the item listed in the Schedule of Quantities and Prices and described in the Special Provisions.
 - b) Reimbursement. -- All requests for reimbursement must be accompanied by a copy of the approved submittal for the Award Item in question, a copy of the invoice clearly indicating the specific award item, quantity & pricing and a copy of the Contractor's payment of the invoice. Reimbursements requests shall be Approved by the Director, Construction Safety or written designee.
 - c) Audit. -- All costs for which the Contract seeks reimbursement shall be subject to financial audit in accordance with the Section entitled MAINTENANCE OF, ACCESS TO AND AUDIT OF RECORDS.
3. Submittal Requirements -- Within thirty (30) Days of the Notice to Proceed (NTP), the Contractor shall develop a detailed SAFETY FIRST INCENTIVE PROGRAM PLAN for submittal to (and Approval by) Metro. Requests for reimbursements under this article will be rejected prior to the Approval of the Contractor's SAFETY FIRST INCENTIVE PROGRAM PLAN.
4. SAFETY FIRST INCENTIVE PROGRAM PLAN Criteria - The Contractor's SAFETY FIRST AWARD PROGRAM PLAN shall address the following:
 - a) Program Administrator. -- Identification of the individual(s) who will administer the Award Program for the Design Builder.
 - b) Employee Eligibility. -- Design Builder's employees, as well as the employees of its Subcontractors (of any tier), who are working at the Site during the eligibility period for the award (hereinafter "Eligible Employees").
 - c) Eligible Employee Listing. -- A process enabling accurate accounting (and reporting) of all Eligible Employees in the Incentive Program.
 1. Contractor and its Subcontractors (of any tier) shall develop and maintain a tabular list of its Eligible Employees, which tracks, at a minimum, the following information regarding each employee:
 - (a) Start and end date at the Worksite;
 - (b) Number of hours worked or logged at the Site;
 - (c) A number count of the times he/she has won an award under the Award Program in question, including date of last award;
 - (d) A number count, logging relevant safety metrics directly attributable to the individual:
 - i. The number of incidents resulting in a recordable injury/illness.
 - ii. The number of vehicle collisions or incidents.
 - iii. The number of incidents resulting in equipment damage (Construction Equipment or otherwise) exceeding five-hundred US Dollars (\$500).
 - iv. The number of incidents meeting the criteria for "Special Circumstances", as defined in the Article entitled ASSESSMENTS FOR SPECIAL CIRCUMSTANCES

2. Upon Metro's request, Design Builder shall provide Metro with an electronic file-copy and/or hardcopy of the latest "Eligible Employee Listing", for itself as well as its Subcontractors (of any tier). The electronic file-copy of the Listing given to Metro shall either be in a spreadsheet or a database format, or as otherwise agreed upon between Contractor and Metro.
5. Incentive Criteria. -- The basis for the Incentive shall be any Eligible Employee (as defined above in this Section) who has:
 - a) No recordable injuries/illnesses;
 - b) No claims of public liability;
 - c) No vehicle accidents or equipment damages exceeding five hundred US Dollars (\$500);
 - d) No incidents meeting the criteria for "Special Circumstances".
6. Incentive Structure. -- The Incentive structure shall include the following:
 - a) Period of performance required for the specific incentive.
 - b) Approximate dollar values of incentives to be awarded, as well as types of awards in each category.
 - c) Incentives for reimbursement shall be logo bearing items such as caps, cups, coolers, jackets, T-shirts, belt buckles, watches and other such items of value to the construction work force.
 - d) The methodology by which Contractor will document and provide certification for awards distributed.
7. Approval of Safety Award Nominations.
 - a) Award Distribution List. -- Prior to issuance of an incentive by the Contractor, the Contractor shall submit to Metro for its Approval, an AWARD DISTRIBUTION LIST containing the following:
 1. A listing of the names of Eligible Employees (as defined above in the previous Section) who are considered by the Contractor for an incentive, for the period to be presented (hereinafter "Incentive Recipients");
 2. The type(s) of incentive to be presented to each Incentive Recipient, for the period to be presented; and
 3. The specific Incentive Criteria used for selection of the Incentive Recipients.
 - b) Approval of Distribution List. -- Metro's Contracting Officer (or its duly delegated Authorized Representative), at its sole discretion, will review and Approve the Contractor's incentive Distribution List, as well as the corresponding distributions of money to the Contractor to fund the awards.
8. Approval of Safety Award Format.
 - a) Award documents must be approved by Metro for style, wording and logo use prior to procurement by the Contractor.
 - b) Items to be used as incentives must be submitted to and approved by Metro as meeting Metro's criteria for design and use of logos prior to being procured by the Contractor.

- c) Failure of the Contractor to obtain required approvals may result in the rejection of payment requests made under this section.

5 PHYSICAL CONDITIONS CONTROL

5.1 Purpose and Scope

Establish and maintain physical conditions in the workplace that control observed or expected hazards and vulnerabilities. This control applies to any area under the control of the Contractor which is or may be occupied by the Project Workforce or exposes the general public to construction hazards or vulnerabilities in any way.

5.2 Objective

Prevent injuries and incidents resulting from uncontrolled physical hazards or vulnerabilities.

5.3 Procedures

A. PLANNING

Planning for the safety and security of the project shall begin with initial design and continue throughout the construction phase. Contractors shall plan the safety procedures to be followed for each phase of construction. The Contractor's Safety Representative, in conjunction with the Contractor's Project Management staff that is directly responsible for the work will develop and implement Job Hazard Analyses (JHA) as part of the development of Construction Work Plans. Use Form CS-51, Worksheet for Job Hazard Analysis (see Exhibit 4-0) or similar form accepted by Metro Construction Safety.

1. Job Hazard Analysis (JHA)

The written JHA is an integral part of the Construction Work Plan. For each work activity undertaken by the Contractor a Construction Work Plan (CWP) shall be developed and submitted in compliance with the Project Quality Requirements and Worksite Safety Requirements Technical Specifications...

- a. The contractor shall submit as soon as possible after Notice to Proceed (NTP) a matrix of JHA's to be completed for major work activities as well as a schedule for the preparation and submittal of the CWPs/JHAs. As work progresses, additional CWPs/JHAs may be required by Metro and shall be submitted upon notification. (See also Section 8.3.A.3 of this Manual.)
- b. JHAs will be developed and submitted with the associated CWP prior to commencement of the activities included in the CWP/JHA and in compliance with the Project Quality Requirements and Worksite Safety Requirements Technical Specifications.
- c. No work included in a CWP/JHA will commence prior to the submittal and acceptance of the CWP/JHA. The CWP/JHA shall be reviewed as part of the Readiness Review meeting in compliance with the Project Quality Requirements Technical Specification.
- d. High Hazard Operations: When a JHA identifies high hazard activities such as, but not limited to the activities listed below, the crew will review the written JHA on a daily basis before starting the work.

- 1) Potential for the release of stored energy; i.e., electrical, pressure, explosive, etc.
- 2) Danger of striking against or being struck by.
- 3) Potential injury from burns, including chemical, thermal and or radiation.
- 4) Potential oxygen-deficient environments, limited access or exit conditions (confined spaces).
- 5) Potential of being caught in, on, or between objects.
- 6) Potential injury the use of improper body positions.
- 7) Potential exposure to toxic/radioactive gases, vapors, mists, dusts, heat, cold or other physical stress agents.
- 8) Potential for property damage or loss of function.
- 9) Any change in process or procedures that effect the crew's operation.

2. JHA's - Distribution and Training

The JHA serves as an operating procedure and shall be made available to the personnel performing the work. A copy of the accepted JHA will be provided to supervisors and foremen involved in the operation and will be reviewed by the affected employees during a crew safety meeting held prior to the start of the new activity. Personnel involved with the operation will be instructed as to the hazards involved and methods required to control the hazards, including emergency action to be taken in the event of an incident. Personnel will be made aware of the procedures to be used and of the requirements of the JHA. The preparation of CWP/JHAs will be included in the contractor's two week look-ahead schedule and will be discussed at the weekly progress meeting.

A. RESPONSIBILITY AND SUPERVISORY TRAINING

The contractor is responsible for effective performance through its supervisors and foremen. The supervisor or foreman has direct control of the work being performed, and the responsibility to observe and correct any unsafe or insecure conditions and/or behaviors that they observe or are brought to their attention.

Supervisors and foremen shall complete 30 hours of job specific safety training before beginning contract related activities. Certification of successful completion of an accredited OSHA 500 Construction Outreach Course shall satisfy this requirement. At a minimum, instruction in the following topics shall be included:

1. Hazard identification and abatement
2. Preparation of Job Hazard Analyses
3. Communications in Safety
4. Applicable Federal and State Regulations
5. Injury and Incident Investigation

Training certificates and other records shall be submitted to Metro for review and acceptance. Training records shall be maintained at the worksite and made available to Metro for review without prior notice.

B. REVIEW OF PHYSICAL CONDITIONS

There are many reviews of physical conditions (inspections) required by statute and this document. However, merely inspecting a work area and documenting physical hazards, security vulnerabilities and unsafe or insecure behaviors does nothing to prevent injuries or losses. Any observation or discovery of physical hazards, security vulnerabilities and unsafe or insecure behaviors must be followed by immediate intervention to control the physical condition or correct the behavior.

1. In addition to other responsibilities for review of physical conditions contained herein, the contractor shall ensure that its Lead Safety Representative makes or coordinates thorough weekly reviews of each of the work areas (including storage, office and/or shop facilities) to ensure compliance with paragraph 1.5.B; utilizing a form approved via the submittal process by Metro. The Contractor may utilize Form CS-54, Construction Safety Hazards Review Record, (see Exhibit 5.1) in lieu of a submitted form to document these reviews. The Safety Representative shall involve the line supervision responsible for each area of work in the inspection of each specific area as a form of training and to expedite correction of the unsafe or insecure condition or practice. Issues that are noted during the review shall be recorded on the approved form. The contractor's project management staff shall be responsible for implementing corrective actions in a time frame appropriate to the severity of the hazard.
2. The contractor shall provide for the performance of required crane inspections and maintain daily, monthly, quarterly, and annual logs. Form No. CS-55, Crane Inspection Record and Form No. CS-56, Wire Rope Inspection Record are included as Exhibits 5-2 and 5-3 and may be used by the Contractor in lieu of the Contractor's equivalent corporate forms. Copies of the completed Forms CS-55 and CS-56, or contractor's equivalent, are to be maintained on the site and shall be provided to Metro upon request without prior notice.
3. Site visits by Representatives of Regulatory Compliance Agencies
 - a. Contractors shall immediately notify the Resident Engineer and Metro Construction Safety Staff whenever a Cal/OSHA or Fed/OSHA compliance officer arrives on the project in compliance with 6.3.G, Inspections by Regulatory Agencies and other sections of this Manual.
 - b. Contractors shall immediately notify the Resident Engineer and Metro Construction Safety Staff of visits by the Fire Department and/or Fire/Safety Inspectors.
 - c. This project is a publicly funded project and at no time shall the contractor or subcontractor at any tier request or require state or federal OSHA compliance officers to obtain a warrant prior to entering a Metro Construction Project. It is; however, appropriate to request a delay in the inspection only until such time as a member of Metro Construction Safety Staff arrives.
 - d. Contractors shall expect continuous monitoring and review of their safety practices and procedures by Metro. Full cooperation by the contractor shall be given to correct any safety or security discrepancies noted verbally or in writing by Metro Construction Safety Staff and or Construction Management Staff. These activities shall not relieve the contractor of any of its regulatory or other obligations. Due to the transitory nature of worksite conditions and personnel, unsafe or insecure conditions or behaviors may occur

occasionally or routinely and may be undetected by any given review by Metro Construction Safety Staff or the staff of the Construction Manager. For this reason, the contractor is expected to exercise absolute control over worksite conditions and personnel through each level of supervision to minimize the potential for injury or property damage.

C. METRO “RED TAG” PROCEDURE

Metro has established a program by which equipment, tools or other items used to complete the work that have been determined to present a potential for injury when used as directed by the manufacturer, shall be removed from service. A tag with a prominent red and black message including the word ‘DANGER’ will be utilized by Metro Construction Safety Staff (Exhibit 5-0). All equipment, tools or other items used to complete the work are subject to periodic inspection by Metro and any item of the contractor that is rejected as not conforming to paragraph 1.5.B of this manual, the manufacturers recommendations, or applicable ANSI standards and presents a potential for injury when used as directed by the manufacturer shall be “Red Tagged” by Metro Construction Safety Staff. The tag will be dated and signed and will note the unsafe condition.

Any item so tagged shall not be used until the condition noted on the tag has been corrected and the tag has been removed by the person who has signed and attached the tag. Any employee who ignores, removes, damages or otherwise tampers with a Metro “Red Tag” shall immediately be removed from the project by the contractor and shall not return to the project without the written permission of the Metro Director, Construction Safety or Construction Safety Manager.

A Metro “Red Tag” is considered the equivalent of a **Notice of Suspension of Work** for the particular equipment, tools or other item so tagged. Any violation of the provisions of this section shall be considered a violation of the Special Circumstances Special Provision, if included in the Contract, and the violation may result in the penalties described in the Special Circumstances Special Provision.

D. INFORMATION EXCHANGE

Nothing shall be done to impede the free flow and exchange of information between the contractor's Safety Representative and Metro Construction Safety Manager or designee.

E. NOTIFICATION OF HAZARDS

Contractors shall provide the RE and Metro Construction Safety Manager with immediate verbal notification, to be followed by written notice of the existence of any hazardous conditions, property or equipment at the worksite that are not under the contractor's control. However, it shall be the contractor's responsibility to take all necessary precautions against injury to persons or damage to property from such hazardous conditions until corrected by the responsible party.

**CS-51
WORKSHEET FOR JOB HAZARD ANALYSIS**

Corporation:		JHA By:	JHA #:
Craft:		Date of Analysis:	
Briefly describe the job:			
Required and/or recommended Personal Protective Equipment:			
WORK OPERATION	POTENTIAL ACCIDENTS OR HAZARDS	SAFE JOB ACTIONS NEEDED	

FORM NO. CS-51 (REVISION 3)



Rear Side



a.

EXHIBIT 5-1 (FORM CS-54)

CONSTRUCTION SAFETY HAZARDS REVIEW RECORD

Contractor:	Metro Contract No.
Worksite Location:	
Person in Charge:	
Date: _____ Time: _____	
Person(s) participating: _____ _____ _____	
Observations:	
Corrective Actions:	

FORM NO. CS-54

EXHIBIT 5-2

CRANE INSPECTION RECORD					
CRANE NO: _____ MILEAGE: _____ HOURS: _____ DATE: _____					
A. GENERAL REQUIREMENTS	OK	*REP	C. MAIN MACHINE	OK	*REP
1. Capacity charts in cab			1. Controls		
2. Special instruction posted			2. Clutches		
3. Barricades (tail swing)			3. Brakes		
4. Exhaust, pipes guarded			4. Brake locks		
5. 5 BC fire ext. in cab			5. Main drum		
6. First-aid kit in cab			6. Boom hoist		
7. Safety glass in cab			7. Boom hoist panel		
8. Guardrails/hand holds			8. Boom hoist kickout		
9. Platform and steps/non-skid			9. Oil leaks		
10. Proximity signs, 10 ft. min.			10. Hook rollers and turret		
B. ATTACHMENTS			D. CARRIER		
1. *Hooks and blocks (safety latch on hook)			1. Steering		
2. Sockets and rope clamps			2. Brakes (all system)		
3. Boom and lacing			3. Lights, horn, wipers		
4. Boom stops			4. Transmission		
5. Spreaders and gantry			5. Differential		
6. Jib and stops			6. Clutch		
7. Outriggers and pads			7. Engine		
8. Counterweights			8. Tires and wheels		
9.			9. Gauges		
10.			10.		
USE WIRE ROPE FORM FOR CABLE INSPECTIONS					
Inspected at: (Location) _____ By: _____					
* Repair or Replace - Respond on reverse side by specific item letter and number. Require separate, recorded annual inspection for deformation and/or cracks.					

FORM NO. CS-55

EXHIBIT 5-3

WIRE ROPE INSPECTION RECORD								
CRANE NO: _____ MILEAGE: _____ HOURS: _____ DATE INSPECTED: _____								
WIRE ROPE		(A) NUMBER OF BROKEN WIRES PER:		(B) % DIAMETER REDUCTION (WEAR OR CORE DAMAGE)		(C) KINKED, CRUSHED OR CUT, LOSS OF LAV., ETC.?	(D) LUBED, CORROSION (INTERNAL OR EXTERNAL), HEAT DAMAGE?	(E) TERMINAL TACKLE, BLOCKS, HOOKS, ETC.?
TYPE	SIZE	LAY?	STRAND?	IND. WIRE?	TOTAL ROPE?			
Main Hoist (Ld. Line)								
Boom Hoist (Top Lift)								
Jib Hoist (Whip Line)								
Pendants (Main)								
Pendants (150 foot boom+)								
Jib guys (Upper)								
Jib guys (Lower)								
Replacement of hoisting rope shall be done in compliance with the replacement criteria set forth in the California Code of Regulations, Title 8, Chapter 4, Subchapter 4, Construction Safety Orders, §1588.6.								
Inspected at: (Location) _____ By: _____								
Comments: _____ _____ _____ _____								

FORM NO. CS-56

5.4 Audit Procedure

In compliance with Metro Staff Policies and Procedures, Metro reserves the right to conduct periodic Audits of the effectiveness of the Contractor's Safety & Security program. These reviews of the Project will be completed on a specific pre-arranged date. Due to the transitory nature of worksite conditions and personnel, unsafe or insecure conditions or behaviors may occur occasionally or routinely and may be undetected by any given review by Metro Construction Safety Staff or the staff of the Construction Manager. For this reason, the contractor is expected to exercise absolute control over job site conditions and personnel to minimize the potential for injury or property damage.

Metro's Construction Safety Staff and the Resident Engineer will schedule the periodic audits. The Resident Engineer shall in turn notify the contractor's Project Manager of the date and time.

The audit team shall consist of the contractor's Project Manager, contractor's Lead Safety Representative/Safety Representative, Resident Engineer, Metro Safety Manager, and or Metro Safety Representative. The team shall review the contractor's worksite including but not limited to active work areas, project public interface areas, and office, mechanical and or storage areas.

6 CALIFORNIA AND UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACTS

6.1 Purpose and Scope

The purpose of this section is to ensure that each Contractor is aware of its responsibility for compliance with the California and/or United States Occupational Safety and Health Acts, (the Acts) and to ensure that the contractor has readily available the applicable occupational and construction safety standards. This section applies to Contracts of any dollar value or duration regardless of whether the Contractor establishes a field office or other formal management area or not.

6.2 Objectives

The prevention of injuries and other losses is the primary rationale for the requirement that contractor's comply with these regulations. Contractors shall comply with applicable portions of these Acts as interpreted by Metro.

6.3 Procedures

A. CAL/OSHA AND/OR FED/OSHA

Under the California Occupational Safety and Health Act (Cal/OSHA), the Department of Industrial Relations has established Safety Orders requiring employers to provide safe and secure working conditions in places of employment in California. The California Code of Regulations, Title 8 - Industrial Relations, contains the Safety Orders for specific industries or activities such as construction or tunneling as well as General Industry Orders which apply to all industries.

Under the Federal Occupational Safety and Health Act (Fed/OSHA), the federal government has established safety standards (Code of Federal Regulations Title 29) for specific industries or activities such as construction or tunneling as well as Standards which apply to all industries.

Contractors shall comply with the recordkeeping requirements of CCR Title 8 in compliance with paragraph 1.5.B of this manual.

Regulations of note to the Contractor include, but are not limited to, the following:

California Code of Regulations, Title 8:

Subchapter 4 - Construction Safety Orders (C.S.O.), §§ 1500 - 1938. These portions of the Cal/OSHA Safety Orders are applicable specifically to construction work. Copies of Subchapter 4 as well as other pertinent portions, or the entire Cal/OSHA Safety Orders may be obtained as indicated in paragraph 6.3.E below. A helpful publication for job supervisors is the "Cal/OSHA Guide for the "Construction Industry" – S-300. S-300 is a digest of basic applicable standards and it is recommended that contractors provide their job supervisors with copies. This document is available electronically from the DOSH website.

Contractors performing work that requires the establishing of Construction Work Zones or other Traffic Controls should be aware that the California Manual of Uniform Traffic Control Devices is incorporated into CCR Title 8 by reference and

shall be treated my Metro as equivalent to any other portion of the Construction Safety Orders.

Subchapter 5 - Electrical Safety Orders (ESO), §§ 2300 - 2974.

Subchapter 7 - General Industry Safety Orders (GISO), §§ 3200 - 6184. Cal/OSHA's Construction Safety Orders are applicable specifically to construction; as such, it does not address the entire spectrum of injury and incident prevention. Cal/OSHA's General Industry Safety Orders (GISO) applies to each employer performing work in California unless specifically superseded by a more specific safety order.

Subchapter 7 - General Industry Safety Orders, § 3203: Injury and Illness Prevention Program (IIPP)/SB198. This addresses the requirements of the written injury and illness prevention program that is required of every employer in the state of California employing more than 10 employees. Each contractor, regardless of the numbers of employees on the project, shall have in place an IIPP that is project and site specific and incorporates each of the specified elements contained in § 3203.

If the specific procedure or hazard is not specifically regulated in the standards discussed in this section, the employer is still charged with the employee's safety and security. Standards for a particular hazard could come from the Manufacturer's Operators Manual, warning labels, ANSI/ISEA standards or other publicly available standards. The employer's failure to discharge its responsibilities to maintain a safe and secure work place is a citable offense.

B. FAMILIARIZATION WITH SAFETY STANDARDS

Each contractor must be familiar with the State and/or United States Occupational Safety and Health Acts (Cal/OSHA and/or Fed/OSHA) as they pertain to the contractor's work responsibility.

C. REPORTING FATAL/SERIOUS INJURIES AND ILLNESSES

Fatal incidents and/or serious injuries and illnesses shall be reported to Cal/OSHA immediately to a Division of Occupational Safety and Health (DOSH) district office in compliance with CCR 8 § 342. Immediately following notification of Cal/OSHA, the Contractor shall notify the Director, Construction Safety or designee. A serious injury or illness as defined by CCR 8 § 330 "any injury or illness occurring in a place of employment or in connection with any employment which requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation or in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement, but does not include any injury or illness or death caused by the commission of a Penal Code violation, except the violation of Section 385 of the Penal Code, or an accident on a public street or highway." Employers must immediately report all blasting incidents to the Mining and Tunneling Unit.

Contractors performing work in or adjacent to a public street or highway shall report any incident within or adjacent to the work zone to Director, Construction Safety or

designee regardless of any involvement of Contractor personnel or equipment. In addition, the Contractor is strongly advised to report any injury that meets the above definition of serious to Cal/OSHA regardless of the location where the injury occurred.

D. LABOR AND OTHER POSTER REQUIREMENTS

State and Federal Regulations include requirements for each employer to post in a defined location various labor compliance, safety and health posters. Failure to post these documents is a citable offense under the Act and posting areas will be reviewed by Metro Construction Safety Staff as part of their assessment of the effectiveness of the Contractor's Safety and Security Program.

E. ORDERING SAFETY MATERIALS

Copies of the California and/or Federal Occupational Safety and Health Act, Safety Orders/Standards and related information on education and training programs may be secured from various sources both locally and outside the local area including via a wide variety of government and private internet sites. If additional information is required regarding the procurement of required standards or other information, contact the Construction Safety Staff or the local Cal/OSHA or Fed/OSHA District Offices.

F. CAL/OSHA PERMIT/REGISTRATION REQUIREMENTS

Contractors shall obtain required permits from the California Division of Occupational Safety and Health and the City and/or County of Los Angeles, or other jurisdictions within which work is being performed, for the following types of construction operations, at a minimum, prior to the start of such operations:

1. Construction of trenches or excavations five feet or deeper into which a person shall be required to descend.
2. The construction of any building, structure, scaffolding or falsework three stories high or the equivalent height.
3. The demolition of any building, structure or the dismantling of scaffolding or falsework more than three stories high or the equivalent height.
4. Operation of diesel engines underground.
5. Prior to doing any asbestos related work register with the California Division of Occupational Safety and Health (Labor Code 6501.5).

G. INSPECTIONS BY REGULATORY AGENCIES

Regular and unscheduled inspections of Metro contracts by Cal/OSHA and or Fed/OSHA as well as other regulatory agencies are to be expected by Metro contractors. Due to the fact that Metro expects to be considered a "Controlling Employer" by both OSHA bodies (see CCR Title 8 §§ 336.10 & 336.11) with respect to the multi-employer worksite policies, the following policy and procedure shall be strictly adhered to:

1. Upon notification of an OSHA inspection by a Compliance Officer, the contractor shall notify immediately the RE or Construction Management staff and the

Director, Construction Safety or designee of the inspection request and provide a copy of these requirements to the OSHA Compliance Officer.

2. It is the policy of Metro that no inspection shall begin without the presence of a member of the Construction Safety Staff designated by the Director, Construction Safety.
3. Upon notification, the Director Construction Safety or designee will provide an estimated time of arrival at the site to participate as the Metro representative.
4. The Contractor or RE shall communicate with the Compliance Officer and request the cooperation of the Compliance Officer in scheduling the start of any opening conference or inspection until Metro representative is present. The RE shall further advise the Compliance Officer as to the estimated arrival time for the representative.
5. These requirements are instituted only to insure proper MTA representation during the inspection process and in no way are to be interpreted as an attempt by Metro or any other party to impede or limit the inspection powers of regulatory agencies. Full cooperation with regulatory agencies is a requirement of this contract.
6. At no time shall a contractor, construction manager or any other entity performing work upon a Metro project request or require the obtaining of a warrant by regulatory compliance personnel before allowing access to the worksite.

7 INCIDENT INVESTIGATION, REPORTING AND RECORDKEEPING

7.1 Purpose and Scope

The purpose of this section is to establish thorough requirements and guidelines for the investigation and timely reporting of any illnesses or injuries affecting any person, including third parties which are in any way connected, associated or otherwise the result of Metro Construction activities.

The Contractor's adherence to the following will promote contractor and subcontractor compliance with MTA incident investigation and reporting requirements, and the State of California statutory recordkeeping requirements.

7.2 Objectives

It is the objective of any incident investigation to determine the root cause(s) of the incident and establish corrective actions, policies and or procedures in order to prevent future recurrence(s).

A. INVESTIGATION

Incidents shall be thoroughly investigated without delay by the contractor. The investigation should generate appropriate recommendations for corrective actions to prevent recurrence of similar incidents. Information gathered during the investigation shall be made available to Metro Construction Safety Department within 24 hours of the incident.

In the event of a serious incident, the contractor shall immediately make an oral report of the preliminary details to Metro in compliance with Section 7.3.C, Telephone Reports, of this document. A serious incident is defined as those injuries to project staff (at any level) or the public that are immediately life threatening, require hospitalization (including admission for observation) and or those injuries that result in time away from work or duty restrictions as prescribed by a physician. Any injury to a member of the public shall be considered serious and reported to the Director, Construction Safety of designee. Serious incidents also include property damage equal to or in excess of \$1,000, regardless of the owner of the property.

Serious incidents may be directly investigated by Metro Construction Safety Staff. Contract or Project employees regardless of tier, shall make themselves available to Metro for interviews regarding the incident under investigation. Depending upon the circumstances and severity of the incident, Contractor employees may be requested to remain at the Project Location beyond their normal shift hours in order to complete the interviews in a timely and appropriate manner. The contractor shall also preserve the incident scene in an undisturbed condition until advised by Metro that the area may be cleaned or otherwise disturbed and work may continue. Compliance with this procedure including the payment of overtime wages to effected employees, as determined by the Director, Construction Safety or designee shall be considered within the original scope of this Contract and shall not delay the schedule for performance of Work by the Contractor nor shall it be relied upon to form the basis of any claim.

The contractor shall provide employee, witness or other personal contact information to Metro immediately upon request and without prior notice with regard to the incident investigation.

B. ANALYSIS AND CORRECTIVE ACTION

Corrective action can only be taken when specific factors of an incident have been accurately developed and the resulting recommendations have been disseminated to responsible persons.

In preparing written reports of an incident, statements and comments should be confined to facts.

The contractor's incident report, project records, progress reports and daily time reports may become important evidentiary material in any ensuing legal action. Accordingly, for the date on which an incident has occurred, it is important to be specific and accurate in describing work being performed, crew and equipment being utilized, and their exact location.

C. RECORDKEEPING

Complete records are necessary incident prevention tools. In addition, specific records are required by Cal/OSHA and/or Fed/OSHA and may become part of an evidentiary record. Failure to maintain these records is a citable offense. Appendix B of this document sets forth Metro recordkeeping requirements which incorporate Cal/OSHA and/or Fed/OSHA guidelines.

7.3 Procedures

A. INVESTIGATIONS AND REPORTS

1. General Requirements

Exhibits 7-1 and 7-2 contain administrative instructions and report forms to be used by contractors and subcontractors for the following required reports:

- a. Supervisor's Incident Investigation Report, CS-52 (Exhibit 7-1)
- b. The Monthly Injury Summary & Work Hour Report,

2. Supervisor's Incident Investigation Report, CS-52 (Exhibit 7-1)

- a. This form, or an approved Contractor's equivalent, shall be submitted to Metro within 24 hours of the incident by the contractor for each incident involving any of the following:
 - i) Injury to an employee of the contractor or any subcontractor.
 - ii) Any injury to persons not directly connected with the project (including all alleged injuries reported by a member of the general public).
 - iii) Incidents resulting in damage to public, private or commercial property (including all alleged property damages).
 - iv) "Near Miss" Incidents - any incident which could have involved any of the above.

- b. Initial submittals shall be made within twenty-four hours of the incident. A complete supplemental report including written statements, sketches, photographs and any other pertinent facts shall be submitted within seven calendar days of the incident.
 - c. This form shall be prepared by the contractor and distributed in accordance with Appendix A, Summary of Construction Safety Reports.
3. The Monthly Injury Summary and Work Hour Report

The Monthly Injury Summary, CS-53 (Exhibit 7-2) shall be prepared in strict compliance with Metro Recordkeeping Policy for Occupational Injuries and Illnesses, Appendix B. The Contractor shall utilize the most recent version of for CS-53 or a Microsoft ® Excel ® compatible data file supplied by the Director, Construction Safety or designee.

B. PHOTOGRAPHS

Photographs shall be taken in conjunction with investigations of all incidents involving serious personal injury, all non-project personnel injuries, substantial property damage (including motor vehicle), equipment or material failure, and all incidents that may, even remotely, involve third party action.

Photographs shall be sufficient in number to adequately reflect the general area as well as pertinent details from a variety of angles. Photographs should be taken as soon as possible following the incident.

Identify each print on its reverse as follows: name of injured (if equipment damage, type; if property damage, location); date of incident; photographer's name, and time photographs taken (date if different from occurrence); direction facing, and brief description of photo.

Documentary photographs shall utilize 35mm color print film or electronic media. The use of photographic equipment capable of imprinting the date upon the negative or electronic image is highly recommended. Developed negatives shall be maintained in file by the contractor or Construction Manager for review by Metro without prior notice. Digital photographs shall be taken utilizing recently manufactured equipment which codes date/time and other data into the image in a manner that cannot be edited. All images taken, regardless of photographic quality or clarity, shall be immediately downloaded from the camera and copied to permanent optical media. The original of this media shall be kept in file by the Contractor. Copies of this media shall be made available to Metro for review or duplication by Metro without prior notice.

In the event of the most serious incidents, additional documentary information may be recorded by the contractor and or Construction Manager utilizing video recording equipment. Video recordings should begin with the time and date recorded directly onto the sequence by the camera's internal mechanism as well as verbally by the camera operator. A duplicate copy of such a recording shall be submitted to the Director, Construction Safety or designee.

C. TELEPHONE REPORTS

Should a serious incident occur, it shall be reported immediately by phone to the Resident Engineer and Director, Construction Safety or designee and others as indicated in the Contractor's Approved Emergency Action Plan. The Resident Engineer shall notify others as outlined in the Metro Emergency Reporting Procedure specific to each project.

The use of electronic mail from portable hand held devices in lieu of a voice telephone call shall be considered a compliant method of notification with regard to Telephone Reports.

EXHIBIT 7-1 (front)

SUPERVISOR'S INCIDENT INVESTIGATION REPORT	
CONTRACTOR: _____	
INCIDENT DATE: _____	TIME: _____ CONTRACT NO: _____
INCIDENT LOCATION (SPECIFIC): _____	
WHAT HAPPENED? (Describe operation, activity, condition and how injury or loss occurred. Use separate sheet and diagram if necessary.):	

PRIMARY CAUSE (Condition or act that caused the injury or loss.): _____	

Recommended correction action: _____	

Equipment involved #: _____	Employee involved: _____
Employee Injury (Describe): _____	
_____ Medical referral?: _____	
Company Property Damage or Loss (Describe): _____	

Property, Damage or Injury to Others (Describe): _____	

Owner/Injured (Name, address, phone): _____	

Witnesses (Name, address, phone): _____	

Police Report?: _____	Agency: _____ Photos?: _____ Taken by: _____
Foreman/Supervisor: _____	Date: _____
Contractor Project Manager/Supt. Approval: _____	Date: _____

FORM NO. CS-52 (front)

EXHIBIT 7-1(back)
SUPERVISOR'S INCIDENT INVESTIGATION REPORT
INSTRUCTIONS

This form is a guideline only. For serious or significant incidents, additional pages and detailed facts, analysis and conclusions must be provided.

Complete investigation of any incident, whether or not injury or damage is involved, is a vital part of an effective prevention program. The investigation is not complete until the causes and proper corrective actions are determined.

The investigation and this report must be completed by you immediately after any incident relating to your job which involves:

- Personal injury to any of our employees or any other persons.
- Damage or loss to company property, materials or equipment
- Damage or loss to property of others
- "Near misses" - which could have involved any of the above

If property damage or personal injury to others is involved, do not assume any responsibility or obligate the company or MTA in any way. Do not sign anything for anyone except your employer's Safety Representative. You should politely refer any question to your office manager.

In your investigation and preparation of this report give extra attention to the following areas:

WHAT HAPPENED?

- (a) This does not mean list the injuries or damages that resulted. It means explain the events, in detail, which led to the injuries or damages.
- (b) Describe the work or activity involved, the conditions and what the people involved were doing.
- (c) Describe the tools, equipment or materials involved, their condition and how they were involved.
- (d) Describe the specific event or occurrence which resulted in the injury, damage or loss.
- (e) If more space is needed or if a diagram will help your description, attach another sheet.

CAUSES: Primary and Secondary - See Common Causes of Incidents below

CORRECTIVE ACTIONS: Primary and Secondary

LOCATION: Specific place on job-site (street and city when applicable).

PROPERTY DAMAGE OR INJURY TO OTHERS: Describe the property, extent of damage or nature of injury. If vehicle is involved, show year and model.

DESCRIBE PRACTICES OF EMPLOYEE	UNSAFE EQUIPMENT OR MATERIALS	UNSAFE CONDITIONS
Safety equipment provided but not used.	Ineffectively guarded equipment.	Poor light.
Personal protective equipment provided but not used.	Unguarded equipment.	Poor ventilation.
Improper or unsafe tool or equipment used.	Defective materials.	Congested area.
Horseplay or practical jokes.	Defective tools.	Improper storage of materials.
Instructions or rules disregarded	Defective equipment (not motor vehicles).	Exits or emergency escapes inadequate or not provided.
Inattention.	Defective motor vehicle equipment.	Faulty layout of plant or facilities
Inexperience.	Improper type or poor design.	Unsafe conditions caused by another contractor or a customer.
Physical condition of employee.	Unsafe equipment or material of another contractor or a customer.	Tools or equipment improperly stored.
Improper method of doing work.		Poor housekeeping.
Action of another person.		
Improper clothing.		

File original for company records, and submit a copy to the Resident Engineer and MTA Construction Safety.

Retain copy for your records. Use a Medical Referral slip for any injured employee who goes to a Doctor.

Keep your office advised.

FORM NO. CS-52 (back)

EXHIBIT 7-2a (front)

MONTHLY INJURY SUMMARY & WORK HOUR REPORT Metro Construction Safety Form CS-53						Contract No: _____ Contractor: _____ Reporting Period: _____			
This form must be submitted to the Construction Safety Department no later than the 10th of each month. Directions: Enter the requested information of the prime contractor and each subcontractor for the reporting period. Report any work related injury including those classified as first-aid. Report number of recordable medical cases that had lost or restricted work days and number of days. Carry over days are for a previously recorded case where the worker is still off in this reporting period.									
	TOTAL HOURS WORKED	TOTAL CASES	TOTAL LWD CASES ¹	LWD LD ONLY ²	LWD RESTR ONLY ³	TOTAL DAYS AWAY ⁴	TOTAL RESTR DAYS ⁵	CARRY OVER LD ⁶	CARRY OVER RD ⁷
PRIME CONTRACTOR									
IDENTIFY ALL SUBCONTRACTORS WORKING ON THE CONTRACT BELOW. DO NOT LIST VENDORS.									
TOTAL (ADD COLUMNS)									
RECORDABLE INJURIES : INFORMATION BELOW MUST EQUAL CASES REPORTED ABOVE									
NAME	CRAFT	TYPE INJURY	DISPOSITION	DAYS OFF	CONTRACTOR				

¹ Include cases with Lost Days, Days of Restricted Duty or both
² Include cases with Lost Days ONLY.
³ Include cases with Days of Restricted Duty ONLY
⁴ Count only Days Away from work for injuries occurring in this reporting period (calendar month).
⁵ Count only Days of Restricted Duty for injuries occurring in this reporting period (calendar month).
⁶ Count only Days Away from work for injuries which occurred prior to this reporting period.
⁷ Count only Days of Restricted Duty for injuries which occurred prior to this reporting period.

EXHIBIT 7-2b (back)

MONTHLY INJURY SUMMARY AND WORK HOUR REPORT (Form CS-53)

1. This form shall be prepared in strict compliance with the Metro Recordkeeping Policy for Occupational Injuries and Illnesses as shown in Appendix B.
2. This form shall be submitted monthly by the contractor to reflect the monthly injury experience of the contractor and each subcontractor.
3. This report shall be submitted monthly no later than the tenth day of each month and shall be signed by the prime contractor's project manager.
4. This form is available in an electronic format (Microsoft Excel). Completing the form in this format is highly recommended.

These report forms do not relieve the contractor from completing the Employers Report of Occupational Injury or Illness and the Cal/OSHA or Fed/OSHA Form 300.

8 REQUIREMENTS AND GUIDELINES FOR SUBMITTALS

8.1 Purpose and Scope

The purpose of this section is to provide the Contractor with information regarding the various safety and security submittals required by the Contract Sections listed below. While this section is not intended to be a detailed “How to” guide, it will provide Contractors with minimum requirements, general information and guidance to assist in the preparation of these submittals.

The sections where the requirements for these submittals can be found are:

- Worksite Safety Requirements Technical Specification
- Worksite Security Requirements Technical Specification
- Safety’s 1st Safety Incentive Program (applies to Major Capital Projects only)
- Construction Safety & Security Manual

8.2 Objectives

It is the objective of any submittal to provide Metro with specific information regarding the Contractors Safety and Security Program and how that Program is being implemented in the field. In addition, completed and approved submittals are in many cases a document that can then be used as a tool in the field to insure compliance with the Contractors Safety and Security Program and in so doing insure compliance with Metro’s Construction Safety and Security Program.

Contractors are strongly encouraged to use an Over the Shoulder Commenting Process when developing the submittals listed below to facilitate the submittal/approval process. An Over the Shoulder Commenting Process involves the Contractor providing Metro staff with a Pre-Final or Final copy of the proposed submittal package for review, comment and comment resolution. Effective use of this type of program will improve not only the return time of packages once officially submitted for Metro review, but will also reduce both the number of comments returned as well as the potential that a submittal is rejected and must be revised and resubmitted.

8.3 Procedures

A. Worksite Safety Requirements Technical Specification (Typically Section 01 53 23)

The following four Submittals Requirements (1,2,3,4) are listed as required for every Metro Contract prior to beginning construction work:

1. Worksite Specific Injury and Illness Prevention Program (IIPP)(01 53 23; 1.05.D.1).
 - A. Minimum Requirements: (Although included in one Contract paragraph, compliance with this section requires for separate stand alone submittals.)
 - Site Specific IIPP which complies with CCR Title 8, Section 3203 (one submittal)
 - Site Specific Emergency Action Plan (one submittal)
 - Contractor’s New Employee Training and Orientation Program (one submittal)

- Site Specific Code of Safe Work Practices which complies with CCR Title 8, Section 1509 and or 8406. (one submittal)

B. General Information and Guidance:

The rationale for breaking these requirements into four separate submittals is two-fold: first this allows the Contractor to submit for review each section as it becomes ready rather than needing to wait for one section when one or more of the others is prepared. In addition, if the need to reject one of the submittals for one reason or another, having four separate submittals allows Metro to approve one part even while another is being rejected for revision.

The first submittal must be an Injury and Illness Prevention Program (IIPP) that has been tailored to the specific Project and Site for the Contract with Metro. Use of the Contractor's corporate IIPP as a starting point is acceptable, but this document must be modified to reflect the unique hazards and conditions presented by the specific work required under the Contract. The primary criteria for this submittal is that the IIPP submitted clearly fulfills the seven requirements found in CCR Title 8 § 3203.

The next submittal is a site specific Emergency Action Plan. This submittal should include the contractor's plans for various foreseeable emergencies including Contact Personnel and means of contact.

The third submittal must be the Contractors New Employee Training and Orientation Program, which when approved will be presented to each employee who is new to the Project (even if they are not new to the Contractor's employ.) This Program should include a review of site specific rules, hazards, control methods as well as a review of the Emergency Action Plan.

The fourth submittal is a copy of the Contractor's Code of Safe Work Practices. This document is required by CCR Title 8 § 1509 (Construction Safety Orders) and § 8406 (Tunnel Safety Orders). The initial submittal may be the Contractors Corporate Code of Safe Work Practices; however, a site specific version must be submitted once actual construction work has begun if requested by the Director, Construction Safety or designee.

2. Staffing Plan (1.05.D.2)

A. Minimum Requirements:

- Resume and credentials which meet the requirements of 01 35 23 Worksite Safety Requirements section as described in paragraph 3.01.F and or 3.01.H.
- Description of the work schedule for each person nominated in compliance with 01 35 23, 3.01.F or 3.01.H. The schedule shall comply with the requirements found in 01 35 23, 3.01.A through 3.01.C.

B. General Information and Guidance:

The Worksite Safety Requirements Technical Specification require the contractor to employ a Lead Safety Representative for the Day Shift and additional Safety Representatives as needed to properly monitor the Contractor's Safety and Security Program. The Contractor is responsible to provide Metro not only with a submittal of the individuals nominated to hold these positions (see item 4 below), but also a schedule of their work hours and days of work. This submittal must be resubmitted any time there is a change in the information

3. Job Hazard Analyses (JHA) Master List (1.05.D.3)

A. Minimum Requirements:

- A list of the expected tasks or operations which will require Job Hazard Analyses to be developed.

B. General Information and Guidance:

This submittal is to be a master listing of the task specific job hazard analyses (JHA) the contractor expects to complete during the prosecution of the work. This listing may be a combination of pre-written JHA's the Contractor already has in place as well as new tasks that will require a new JHA. This list is not expected to be all encompassing or complete, it is however, expected to be a well thought out starting point for the Contractors development of JHA's.

4. Qualified or Competent Persons (1.05.D.4)

A. Minimum Requirements:

- The name(s) and qualifications of individuals designated by the Contractor as Qualified Competent Persons and the activities to which the designation applies.
- Qualified Crane Operators are to be submitted under this Section. Crane Operator submittals shall contain only the following information: Operators name, employer and a readable photocopy of the individual's Operators Certification Card (both sides).

B. General Information and Guidance:

Over one hundred sections of the Cal-OSHA regulations require a "Qualified Person" to perform or supervise the task. CCR § 3207 (General Industry Safety Orders), § 1504 (Construction Safety Orders) and § 8405 (Tunnel Safety Orders) each use the following language:

"Qualified Person, Attendant or Operator": A person designated by the employer who by reason of his training and experience has demonstrated his ability to safely perform his duties and, where required, is properly licensed in accordance with federal, state, or local laws and regulations."

It is the responsibility of the Contractor to determine who meets this definition for required operations or tasks. This submittal should contain the following information:

- Task or operation the individuals are qualified to oversee/perform
- Names of the Qualified Person(s)
- Employer of the Qualified Person(s) (if different from the Contractor)
- Rationale for Qualification including copies of appropriate certification, license or other identification.

This submittal is to be resubmitted whenever there is a change to the submitted list.

The following Submittals (5 through 15) are listed as required as needed for every Metro Contract prior to performing work activities related to or covered by the submittal:

5. Fall Protection Program (1.05.D.5)

A. Minimum Requirements:

- The Fall Protection Program shall be site specific and include details of procedures, equipment and training to prevent falls during the Contractor's Work.

B. General Information and Guidance:

The Worksite Safety Requirements of the Contract require the contractor to prevent employees from being exposed to an unprotected fall hazard of six feet (6') or greater. This requirement applies to any work being done by the contractor's employees or any tier subcontractor employees as part of the Work. The Fall Protection Program shall be submitted and accepted prior to any Work covered by the program. The program is to be revised and resubmitted as conditions warrant.

This program shall be established and implemented to ensure that the Contractor's and subcontractor's workers, exposed to a vertical fall of six (6) feet or more to another level, are properly protected. This program shall provide protection from hazards such as, but not be limited to: skylights (at any angle), floor and wall openings, leading edges, and steel erection. Methods of protection shall include, but not be limited to: fixed systems (guardrails, covers, nets, etc.), personal fall arrest systems and job specific fall protection plans. A key provision of this program shall be that no employee shall work in an unprotected manner while exposed to a vertical fall of six (6) feet or greater.

The size, complexity and detail of this program will vary from Contract to Contract depending upon the Scope of Work. Over The Shoulder reviews with Metro's Construction Safety Staff prior to completing and submitting the program will significantly help the contractor submit a program which can be approved by Metro.

6. Hazardous Waste Operations and Emergency Response (1.05.D.6)

A. Minimum Requirements:

- Listing of qualified personnel with documentation of required training and experience.
- Site Specific Health and Safety Plan (if not submitted as required by another Contract Section other than 01 35 23 – Worksite Safety Requirements).

B. General Information and Guidance:

Submit a list of Hazardous Waste Operations (Hazwoper) qualified personnel at least 15 days before commencing any excavation or other activity which exposes employees to known hazardous wastes or involves the clean up and removal of known hazardous wastes. Update at monthly intervals during ongoing hazardous waste operations. Include, for each individual, the date of certification and sufficient evidence of training and medical screening to conform to appropriate laws, regulations and the requirements of this Contract.

This submittal is in regards to the training required by CCR Title 8, Section 5192, Hazardous Waste Operations and Emergency Response (Hazwoper), with respect to the handling of hazardous or contaminated wastes and the mandated specialty training and health screening.

Unless required by another section of this contract, also submit as part of this requirement the written site specific Hazwoper Health and Safety Plan for the planned work. Plan to be revised and resubmitted as conditions warrant.

7. Excavation Action Plans (1.05.D.7)

A. Minimum Requirements:

- An Excavation Action Plan (similar to a Construction Work Plan) for the designated excavation activity. The plan should not only explain the expected steps and ground support systems(s) to be used, but also explain any contingencies to be used in the event the excavation activities are not able to be conducted as planned.

B. General Information and Guidance:

Excavation Action Plans are required to be submitted for any excavation activities for which a protective system is required by CCR Title 8 Section 1541.1(a). A Protective System is defined as “A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection”.

Include drawings for any ground support system to be used during the excavation activity. Include the slopes and configurations of sloping or benching systems. Also include the general Construction Work Plan for the excavation as well as the Contractor’s Contingency Plan should the soils encountered not meet the engineering requirements for the chosen support system.

Excavation Action Plan submittals shall be submitted at least 15 days prior to the planned Work. Compliance with this provision and any stoppage of Work resulting from compliance with this provision shall be considered within the original scope of this Contract and shall not delay the schedule nor shall it be relied upon to form the basis of a claim for delay for performance of Work by the Contractor.

8. Crane Certifications (1.05.D.8)

A. Minimum Requirements:

- Submit the current Annual and Quadrennial Certification forms for each crane to be used on the Project at least 15 days prior to the equipment arriving on site.

B. General Information and Guidance:

Provide annual and four year certifications for any cranes operated on the Worksite by the Contractor and or subcontractors of any tier. Resubmit as required on multi-year projects or if the crane is recertified during the prosecution of the Work.

Re-certification is required for any crane subjected to any upset, overloading, side pulling, shock loading or support failure, prior to any further use of the equipment on the Worksite.

Crane information shall be submitted prior to the crane arriving on the Work Site for any equipment owned by the Contractor or Subcontractor of any tier.

EXCEPTION 1 – The Prime Contractor is responsible for procuring and submitting certification documents for rental cranes in the same manner and time frame as owned equipment. However, if the rental company changes the assigned equipment without prior notification to the renting Contractor, the certification paperwork may be submitted at the time the crane arrives on site ONLY AFTER field verification by Metro Construction Safety Staff.

EXCEPTION 2 – Knuckle Boom and or Stinger type cranes fixed to flat bed trucks owned and operated by vendors making irregular deliveries to the Work Site need not be submitted. This exception also applies to the Operators of this equipment. This equipment is subject to field verification by Construction Safety Staff.

EXCEPTION 3 – Crane equipment used in Pile Driving operations are held to a different annual inspection standard than cranes in use for material handling. These cranes require an annual inspection that is equivalent to and recorded as a Quadrennial Inspection. Therefore, only the most recent Quadrennial Inspection Report need be submitted for these cranes.

9. Critical Lift Plans (1.05.D.9)

A. Minimum Requirements:

- A complete lift plan for the specific lift. Plan shall contain the elements list below:

B. General Information and Guidance:

Critical Lift Plans - Before making a Critical Lift, a Critical Lift Plan shall be prepared by the crane operator, lift supervisor, rigger. The plan shall be reviewed and signed by all contractor personnel involved in the lift. The signed plan shall be submitted for acceptance by Metro. The lift shall not be under taken until the Contractor has received the Accepted Submittal from to Metro.

Critical Lift: A Critical Lift is defined as a crane lift requiring detailed planning and additional or unusual safety precautions. Critical lifts include, but are not limited to:

- lifts made with more than one crane;
- hoisting of personnel with a crane;
- a lift which will meet or exceed 80% of the rated capacity of the specific crane as indicated on the Manufacturer's Load Charts or Tables;
- lifts which the load will be lifted, swung, or placed out of the operator's view;
- a lift which by its nature is unusual and not regularly (at least monthly) completed by the lifting crew (Crane operator, oiler & or riggers);
- Any lift deemed Critical by Metro.

The Critical Lift Plan shall include, at minimum, the following elements:

The exact size and weight of the load to be lifted and all crane and rigging components which add to the weight.

The manufacturer's maximum load limits for the entire range of the lift, as listed in the load charts, shall also be specified.

The plan shall specify the lift geometry and procedures, including the crane position, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift.

The plan shall designate the crane operator, lift supervisor and rigger and state their qualifications.

The plan will include a rigging plan that shows the lift points and describes rigging procedures and hardware requirements.

The plan will describe the ground conditions, outrigger requirements, and if necessary, the design of mats, necessary to achieve a level, stable foundation of sufficient bearing capacity for the lift.

The plan will list environmental conditions under which the lift operations are to be stopped.

The plan will specify coordination and communication requirements for the lift.

The plan will include any traffic control requirements including a schedule of lane takes and releases.

Strict compliance with this paragraph as determined by Metro or its designee shall be considered within the original scope of this Contract and shall not delay the schedule for performance of Work by the Contractor nor shall it be relied upon to form the basis of a claim for delay. Compliance with determinations by Metro or its designee shall not relieve the Contractor from other obligations imposed by law or regulation nor serve as the basis of request for change to increase the cost of the Work.

10. Qualified Riggers and Signalers (1.05.D.10)

A. Minimum Requirements:

- A list of personnel designated by their employer as trained and qualified as either a Crane Load Rigger or Crane Signaler or both.

B. General Information and Guidance:

The submittal shall include a description of each candidates training, experience and qualifications. Training may be from in-house or outside training sources. This list shall be re-submitted by the contractor upon any changes in the personnel submitted.

11. Energy Isolation Program (Lock Out, Tag Out) (1.05.D.11)

A. Minimum Requirements:

- Submit a site specific written program in compliance with the requirements of CCR, Title 8, § 3314 - The Control of Hazardous Energy for the Cleaning, Repairing, Servicing, Setting-Up, and Adjusting Operations of Prime Movers, Machinery and Equipment, Including Lockout/Tagout.

B. General Information and Guidance:

Include details of procedures, equipment and training. This program shall be established and implemented to ensure that the Contractor's and Sub-contractor's workers exposed to sources of stored energy are properly protected. This program shall provide protection from hazards such as, but not limited to: electrical, hydraulic, gravitational and compressed air or gas. The Energy Isolation Program shall be submitted and accepted prior to any Work covered by the plan.

12. Written Compressed Air Safety Program (1.05.D.12)

A. Minimum Requirements:

- Submit a site specific written program in compliance with the requirements of CCR, Title 8, Article 154 (§§6070 – 6120)

B. General Information and Guidance:

Employees working in a compressed air environment encounter specific and unusual hazards. The minimum requirements for the control of these hazards are found in CCR Title 8, Article 154 – Pressurized Worksite Operations. While this section of the CCR does not have a specific requirement for a written program when conducting Pressurized Worksite Operations, the requirements of §3203 and the Injury and Illness Prevention Program provide an umbrella of responsibility for the drafting of a written program.

Compressed air operation shall not be commenced by the Contractor prior to the approval of the written program and Qualified Persons.

Consult and retain one or more physicians licensed in the State of California familiar with and experienced in the medical aspects of compressed air work. Submit this information as a Qualified Person in compliance with 8.3.A.4 above.

13. Written Track Maintenance Plan (Tunnel Construction) (1.05.D.13)

A. Minimum Requirements:

- Submit a site specific program for the maintenance of the construction haulage rail system. The program shall ensure compliance with the manufacturer's recommendations and provide for the maintenance of the rails in a safe operating condition.

B. General Information and Guidance:

Written Track Maintenance Plan (Tunnel Construction) to be revised and resubmitted as conditions warrant as determined by the Authority.

This plan should be based upon the recommendations of the manufacturer and should include both maintenance and inspection procedures and documentation to insure the rail system is kept in a safe operating condition.

14. Confined Space/Underground Emergency Response Team Program (1.05.D.14)

A. Minimum Requirements:

- Site specific written Plan and Program for Emergency Response into either Confined Spaces or Underground Construction areas (or both).

B. General Information and Guidance:

This submittal should include training procedures, equipment lists, equipment maintenance and inspection plan for The Confined Space/Underground Emergency Response Team for confined space and/or underground emergency entry and rescue as determined by the Authority.

The Confined Space/Underground Emergency Response Training shall be coordinated with the Los Angeles Fire Department or the Authority Having Jurisdiction to ensure that rescue personnel are familiar with the confined spaces/tunnels during construction.

The Plan should describe training provided to employees of various responsibilities including notification procedures, first response duties, response protocols and other aspects of a Confined Space/Underground Emergency Response.

15. Injury and incident Reports (1.05.D.15)

A. Minimum Requirements:

- Monthly report submitted to Metro which reports work hours, injuries and other injury related data. These reports are to be submitted using an Excel spread sheet provided to the Contractor by Metro.
- Incident specific reports for any incident meeting the definition of *incident* below.

B. General Information and Guidance:

As part of Metro's responsibility to monitor site safety and security, the Contractor is required to communicate certain information to Metro on both a regular and an as needed basis. The contractor shall report to Metro immediately upon becoming aware of an incident, injury, or illness involving an employee of the project (including Metro or third party staff) or a member of the public.

By the 10th calendar day of each month of the contract, the contractor shall submit for review and record incident, injury, work hour statistics on the form provided by Metro. See Appendix B for additional definitions and information.

For the purposes of these reports the following definitions shall apply:

- i. *First Aid* means the following:

- a. Using a non-prescription medication at nonprescription strength (for medications available in both prescription and non-prescription form, a recommendation by a physician or other licensed health care professional to use a non-prescription medication at prescription strength is considered medical treatment);
 - b. Administering tetanus immunizations (other immunizations, such as Hepatitis B vaccine or rabies vaccine, are considered medical treatment);
 - c. Cleaning, flushing or soaking wounds on the surface of the skin;
 - d. Using wound coverings such as bandages, Band-Aids™, gauze pads, etc.; or using butterfly bandages or Steri-Strips™ (other wound closing devices such as sutures, staples, etc., are considered medical treatment);
 - e. Using hot or cold therapy;
 - f. Using any non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for recordkeeping purposes);
 - g. Using temporary immobilization devices while transporting an accident victim (e.g., splints, slings, neck collars, back boards, etc.).
 - h. Drilling of a fingernail or toenail to relieve pressure, or draining fluid from a blister;
 - i. Using eye patches;
 - j. Removing foreign bodies from the eye using only irrigation or a cotton swab;
 - k. Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means;
 - l. Using finger guards;
 - m. Using massages (physical therapy or chiropractic treatment are considered medical treatment for recordkeeping purposes); or
 - n. Drinking fluids for relief of heat stress.
- ii. *Incident*: Any occurrence resulting in (a) an Occupational Injury, (b) an Occupational Illness, (c) Personal Injury to a third party (defined as any person not employed by the Contractor or Metro) (d) property damage to any property, real or other, estimated at \$1,000.00 or more or (e) theft of or intentional damage to any property, real or other, estimated at \$1,000.00 or more.
 - iii. *Lost workday cases* are those which involve days away from work, **or** days of restricted work activity, **or both**.

- iv. *Lost workday cases involving days away from work* are those which result in days away from work (not counting the day of injury or onset of illness), or a combination of days away from work and days of restricted work activity.
- v. *Lost workday cases involving restricted work activity* are those which result only in restricted work activity, defined as follows: The employee was assigned to another job on a temporary basis; **or** The employee worked at a permanent job less than full time; **or** The employee worked at a permanently assigned job but could not perform all duties normally connected with it.
- vi. *Nonfatal recordable injuries and illnesses are:* 1. Nonfatal occupational illnesses; or 2. Nonfatal occupational injuries which involve one or more of the following: Lost work time, loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.
- vii. *Occupational injury* is any injury such as a cut, fracture, sprain, amputation, etc., which results from a work-related event or from a single instantaneous exposure in the work environment. The level of care provided is not relevant to the definition.
- viii. *Occupational illness* is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or diseases which may be caused by inhalation, absorption, ingestion, or direct contact.

16. Materials Hazards Communication Program (CSSM 8.3.A.16)

C. Minimum Requirements:

- Submit a plan for the coordination and exchange of Material Safety Data Sheets (MSDS) for products used as part of this work.

D. General Information and Guidance:

As part of Metro's responsibility to provide material safety information to its employees, consultants and contractors, the Contractor must provide Metro with information regarding the location and mode of storage of Material Safety Data Sheets for chemicals the contractor will introduce to the Work Site. This submittal, beyond providing Metro with the information it requires from the Contractor also triggers a response from Metro which will include information on the Metro material Hazard Communication Program and the location of and access to Material Safety Data Sheets for chemicals used at Metro Facilities.

B. Worksite Security Requirements Technical Specification (Typically Section 01 53 35)

The following Submittal is listed as required for every Metro Contract prior to beginning construction work:

1. Worksite Specific Security Plan (1.05.D.1).

A. Minimum Requirements:

- A site specific security plan which outlines the various security measures the contractor will be taking to secure the Project.

B. General Information and Guidance:

The Submitted Program shall address both active and passive security measures to be implemented by the Contractor and shall include, but is not limited to the following.

- a. Security Guard Service – The contract may require or the contractor may elect to employ a security guard service. This section of the plan should review the requirements for that service, work hours, posts, roving responsibilities and routes, etc.
- b. Lighting / illumination – Providing and maintaining adequate lighting throughout each area of the Worksite including but not limited to staging, lay-down areas and employee parking lots is an important aspect of a Security Plan. This section should include minimum lighting levels to be maintained, inspection and maintenance provisions and lighting plans for applicable areas of the Project.
- c. Office Security – Project office facilities directly supporting the Work require physical security to prevent entry, alarm systems to deter burglars and alert occupants as well as other measure to ensure the security of staff in these facilities.
- d. Physicals barriers – Physical barriers are the first line of security for many Project areas. Fences and other barriers need to be planed and design to be in compliance with contract specifications as well as providing the desired security.
- e. Project warning signage – Posting warning signage is another way the Contractor secures the Project and provides information to workers and the public regarding areas of restricted or authorized access only. Plot plans of Project areas should indicate not only lighting and physical barriers but also expected signage.

The initial submittal for this requirement is to be a preliminary Plan that includes plot plans for the initial yards, storage area, trailer camps and office buildings that will support the Project. As additional areas are added to, or other changes are made to the Project site, the Plan shall be updated and resubmitted.

C. Safety's 1st Safety Incentive Program (applies to Major Capital Projects only)

The following Submittal is listed as required for every Metro Contract prior to beginning construction work:

1. Safety's 1st Safety Incentive Program (1.05.D.1).

A. Minimum Requirements:

- First Submittal – written program plan which complies with the requirements of the Contract Section that contains the Safety's First Incentive Program details and requirements.
- Subsequent Submittals – for each item to be purchased by the contractor for distribution, the contractor must provide a proof of the layout of the logo's and text for approval prior to actually ordering the merchandise. Listing of Eligible Employees may also be requested to be submitted by the Director, Construction Safety or designee.

B. General Information and Guidance:

Incentive programs can create a positive consequence that rewards desired behaviors. This assists the employer in modifying the behaviors of employees from undesirable behaviors and outcomes to desirable behaviors and outcomes. Metro recognizes that the behaviors of every person on the Project, regardless of station or duties, have an equal potential impact on overall Project safety and security. Therefore, this program is intended to equally reward all employees of the Contractors team regardless of subcontracting tier or position.

Due to the administrative and other requirements for Metro when a Program of this type is sponsored, only larger Capital Construction Contracts are eligible to have this program included in the Contract. When this Program is included in a package, information regarding the value of the Program is found in the Special Provision titled – SAFETY’S FIRST INCENTIVE PROGRAM.

Details regarding the submittal and other requirements for this Program are found in Section 4.3.G of this Manual. The submitted Plan must fulfill those requirements while documenting the fair and equitable distribution of incentive awards.

D. Construction Safety and Security Manual

The following Submittals are listed as required for every Metro Contract prior to the contractor being able to participate in the Alternate Safety Coverage Program:

1. Alternate Safety Coverage Policy – Candidate Roster (2.4.A.2).

A. Minimum Requirements:

- First Submittal – List of nominated candidates and their qualifications.
- Subsequent Submittals – Changes to the approved DSR listing (either new candidates for approval or deletions from the approved list).

B. General Information and Guidance:

The first submittal for this requirement is to be a list of candidates for DSR coverage. The submittal should contain at minimum the name of each candidate, information on their qualification including documentation of experience, appropriate training records and any Cal/OSHA Mining and Tunneling certifications or first aid/CPR training certifications.

The minimum requirements for DSR Candidate Qualifications are found in section 2.4.C of this manual. Additional information deemed useful by the Contractor to Metro in approving the candidate may also be included.

Additional submittals under this requirement must indicate any deletion(s) to the current Approved list (if any) as well as provide the names of new candidates for DSR coverage. Information submitted for new candidates should contain similar information to the initial submittal.

2. Alternate Safety Coverage Policy – Alternate Safety Coverage Request Form (DSR-1) (2.4.A.5).

A. Minimum Requirements:

- Completed Alternate Safety Coverage Request Form (DSR-1)

B. General Information and Guidance:

This submittal is required whenever the Contractor's Lead or other Safety Representative(s) will be off the Project and unable to fulfill contractually required duties and responsibilities as described in Section 2.4. This form MUST be completed and submitted at least 48 hours in advance of the coverage need as indicated in paragraph 2.4.A.5.

As indicated in Section 2.4, DSR coverage is expected to be limited to no more than fourteen consecutive days for any reason. In the event that the Contractor becomes aware of a situation where more than fourteen (14) consecutive days will be required, the Metro Construction Safety Manager should be notified immediately to discuss what options the Contractor has to propose to ensure compliance with the terms and conditions of the contract.

The following Submittals are listed as required for every Metro Contract prior to the contractor beginning Design or Construction work:

3. Alcohol and Drug Free Workplace Program (4.3.E).

C. Minimum Requirements:

- First Submittal – Complete and Compliant Program. (See 4.3.E for detailed list of minimum requirements.)
- Subsequent Submittals – Changes to the Approved Program as determined by the Contractor or Metro.

D. General Information and Guidance:

The first submittal for this requirement is to be a complete and compliant Alcohol and Drug Free Workplace Program as described in Section 4.3.E. The minimum requirements for the A&DFW Program are found in Section 4.3.E of this manual.

4. Alcohol and Drug Free Workplace Program – Monthly Status Report (4.3.E.8).

C. Minimum Requirements:

- Monthly Invoice or Inventory Report indicating ongoing A&DFW Program activities.

D. General Information and Guidance:

This monthly submittal is outlined in the Contractors Approved Alcohol and Drug Free Workplace Program to fulfill the requirements of Section 4.3.E.8.

9 9. APPENDICES

9.1 APPENDIX A – SUMMARY OF CONSTRUCTION SAFETY REPORTS

FORM NO.	TITLE	EVENT(S) GENERATION REQUIRED REPORT	PREPARED BY	DIST	REMARKS
CS-49	Report of Safety Meeting	Recording of weekly tool box meeting	Supervisor/Foreman holding meeting	(3)	
CS-51	Job Hazard Analysis	Known safety hazards and all major construction operations	Contractor	(1)	Filled out and submitted within 24 hours of the event
CS-52	Supervisor's Injury Investigation Report	Bodily injury to contractor/subcontractor employee or the general public	Contractor	(5)	Report must be submitted within 24 hours of the event.
CS-53	Monthly Injury Summary & Work Hours Report	Monthly report	Contractor	(2)	
					Metro
CS-55 and CS-56	Crane Inspection Record & Wire Rope Inspection Record	Monthly report(s)	Contractor	(1)	
Federal OSHA and Cal/OSHA Form 300	Log & summary of occupational injuries & illnesses	Employee occupational injury or illness	Contractor	(3)	Contractor required to retain Form 300 and related records for 5 years subject to Cal/OSHA and/or Federal OSHA inspection.
Distribution: (1) Contractor, RE, SM (2) Contractor, SM, RE, MTA (3) Contractor (4) Contractor, RE, SM, (5) Insurer, Contractor, SM, RE					

RE = Resident Engineer; SM = Metro Safety Manager

9.2 APPENDIX B - RECORDKEEPING POLICY FOR OCCUPATIONAL INJURIES AND ILLNESSES

A. INTRODUCTION

Injury reporting and recording activities shall be in compliance with the applicable sections of CCR Title 8, Chapter 7 and CFR Title 29, Parts 1904 and 1952. Strict compliance with these regulations, as interpreted by Metro, shall be considered within the original scope of this Contract and shall not delay the schedule for performance of Work by the contractor nor shall it be relied upon to form the basis of a claim for delay. Compliance with determinations by Metro or its designee shall not relieve the contractor from other obligations imposed by law or regulation nor serve as the basis of request for change to increase the cost of the Work.

Thorough investigation of all factors relating to the occurrence of each reported work-related injury or illness is essential. Determination as to whether or not the case should be considered recordable under the provisions of the applicable Regulations and this Policy shall be based upon the evidence developed in such investigations. Unless there is a preponderance of evidence that the injury or illness did not result from the work activity or environment of employment in compliance with State of California and or Federal regulations, the injury or illness shall be considered a work-related case.

B. PURPOSE

The purpose of reporting occupational injuries and illnesses to Metro is to provide an accurate and uniform method for recording, classifying, and reporting injuries as a means of evaluating safety and injury prevention programs and establishing training requirements for this and future projects. These records will also be utilized to determine eligibility and merit within the Craft Level Safety Incentive Program (CLSIP). This procedure shall not replace the employers' legal responsibility for accurately recording and reporting all work-related injuries and illnesses to the appropriate government agencies in compliance with State and Federal Occupational Safety and Health Regulations.

In order to insure accurate and uniform recording, classifying, and reporting of injuries and illnesses, Metro utilizes strict interpretations of the recordkeeping regulations as promulgated by the United States and California OSHA. Interpretive letters and other documents published by these agencies shall be the sole source of interpretive information regarding the recording, classifying, and reporting of injuries and illnesses.

Metro recognizes the need to support and encourage the returning to work of injured employees as soon as is medically appropriate and recommended following an occupational injury or illness. This philosophy is proven Metro improve the quality of life of the employee by preventing the loss of self esteem that frequently occurs in individuals who remain out of work for extended periods. However, each case shall be recorded in compliance with California and United States Regulations.

C. SCOPE

This policy shall apply to Metro construction field staff, consultants, prime contractors and subcontractors.

D. DEFINITIONS

- a. 1. Employee: Any person paid W-2 reportable wages for work performed in direct connection to a contract for the construction or construction management of a Metro Transit project. This includes both those who appear on that employer's Certified Payroll Report and salaried or other supervisory staff who do not. Staff members of Metro and Metro consultants, whose job duties involve work on the construction worksites shall come under this definition.
- b. 2. Work Hours: The total number of actual hours worked by all employees including craft workers, clerical, administrative, and supervision, overtime hours are to be counted as straight time. This shall also include all hours for any subcontractor but NOT for suppliers and vendors. Hours worked are to be used for calculating incidence rates. When actual hours cannot be accurately determined, estimated hours may be used, provided the estimate is replaced within thirty days by a report of actual hours used from documented sources. If employee hours are estimated, indicate the reason for the estimation and the basis upon which estimates are made.
- 1) 3. FLSA Exempt Employee: For executives, project management, supervisors, and other employees whose working hours are not defined, the employer shall use an average of 8 hours per day for computing exposure hours.
- c. 4. Work Environment: The work environment is comprised of the physical location, equipment used, and kinds of operations performed by an employee in the performance of his work associated with Metro Transit Project, whether on or off the project premises.
- d. 5. First-Aid Treatment: First Aid treatment is defined as those treatments listed under the definition of first aid in CCR Title 8, Chapter Seven. Any other treatment provided which does not appear in the regulatory definition of first aid shall be considered Medical Treatment regardless of who provides the treatment.
- e. 6. Medical Treatment: Any medical procedure or treatment which is not included in the definition of First Aid in CCR Title 8 or excluded as a diagnostic procedure or treatment by the regulations regardless of who provides the treatment.
- f. 7. Diagnostic Procedures: Certain diagnostic procedures performed by medical personnel such as x-rays or blood tests, including the administration of prescription medications used solely for diagnostic purposes as defined in CCR Title 8.
- g. 8. Preventive Procedures: Tetanus shots or tetanus boosters are considered preventive first-aid and not medical treatment. However, the treatment for a reaction to a tetanus shot administered because of an injury shall be considered medical treatment.
- h. 9. Work-Related Case: Any injury suffered by an Employee which results from a work incident or from an exposure involving a single incident in the work environment, and any illness caused by exposure to environmental factors associated with employment. Work environment is comprised of the physical location, equipment and materials used, and kinds of operations performed by an employee in the performance of his work, whether on or off the employer's

premises. Whether any case is work-related will be determined in strict compliance with applicable regulations and reviewed by Metro.

- i. 10. Recordable Case: A work-related injury or illness requiring medical treatment. Recordable cases are cases which result in one or more of the following:
 - 1) a) Death, regardless of the time between the occupational injury or illness and death, provided the cause of death is determined to be directly related to the occupational injury or illness by the county coroner.
 - 2) b) Days away from work.
 - 3) c) Restricted work or transfer to another job.
 - 4) d) Medical treatment beyond first aid.
 - 5) e) Loss of consciousness.
 - 6) f) A significant injury or illness diagnosed by a physician or other licensed health care professional.

- j. 12. Lost Work Day Cases: Lost Work Day Cases are comprised of two types of lost work: Days Away from Work and Days of Restricted Duty. An individual case may include either one, the other or both types of Lost Work Days.
 - 1) a. Days Away from Work are those calendar days (consecutive or not) on which the employee could not work due to an occupational injury or illness. Lost work days shall not include the day of injury or onset of illness but shall include all calendar days from the days after the injury or onset of illness until the employee is medically cleared to return to full duty.
 - 2) b. Restricted Duty Cases which include days upon which the employee is unable to perform any or all of the defined duties of the particular craft, trade or job title to which the employee was assigned upon the day of injury shall also be considered Lost Work Day Cases.

- k. 13. Calculation of Incident Rates: Injury and illness experience is related to a common exposure base of 100 full-time worker years (2000 hours per worker year). The common exposure base enables management to make accurate comparisons, trend analyses or comparisons among other similar projects regardless of size. These measurements are called Occupational Injury and Illness Incident Rates. Metro Transit Projects will be compared against the most recently available industry average for construction as published by the US Bureau of Labor Statistics. Metro will measure:

- l. 14. Recordable Case Incident Rate: Total number of OSHA recordable cases for the reporting period.

TOTAL RECORDABLE INCIDENT RATE:

$$\frac{\text{NO. OF RECORDABLE CASES X 200,000}}{\text{ACTUAL EMPLOYEE HOURS}}$$

- m. 15. Lost Workday Case Incident Rate: Recordable cases that are classified as Lost Workday Cases for the reporting period.

LOST WORKDAY CASE INCIDENT RATE:

$$\frac{\text{NO. OF LOST WORKDAY CASES X 200,000}}{\text{ACTUAL EMPLOYEE HOURS}}$$

- n. 16. Lost Workday Case (Days Away) Incident Rate: Recordable cases that are classified as Lost Workday Cases with days away from work only for the reporting period.

LOST WORKDAY CASE (DAYS WAY) INCIDENT RATE:

$$\frac{\text{NO. OF LOST WORKDAY CASES WITH DAYS AWAY ONLY X 200,000}}{\text{ACTUAL EMPLOYEE HOURS}}$$

- o. 17. Lost Workday Case (Restricted Duty) Incident Rate: Recordable cases that are classified as Lost Workday Cases with Restricted Duty only for the reporting period.

LOST WORKDAY CASE (RESTRICTED DUTY) INCIDENT RATE:

$$\frac{\text{NO. OF LOST WORKDAY CASES WITH RESTRICTED DUTY ONLY X 200,000}}{\text{ACTUAL EMPLOYEE HOURS}}$$

E. PROCEDURE

Upon notification of a work-related injury or illness the employer shall record and classify the injury.

Submitting a worker's compensation claim does not alone determine that an occupational injury or illness is recordable. Claims may be submitted for cases in which only first-aid and or diagnostic treatments were rendered by a physician or registered professional.

Employer shall notify MTA Construction Safety and the Resident Engineer immediately of all occupational injuries or illnesses and, within 24 hours, submit a copy of the Claim forms, supervisor's incident investigation, medical release form, and physician report. These documents assist the Construction Safety staff in determining injury or illness trends that may occur on the project, and verification that all work-related injuries and illnesses are properly recorded. Follow-up reports provided by the Health Care Provider must be forwarded to MTA Safety within 24 hours of receipt.

Failure of the contractor to provide this documentation to Metro within the specified time frame (including injury notifications) may result in the revocation of the Alternate Safety Coverage Policy, the invocations of Special Assessments as defined in the Special Provisions and or the loss of Craft Level Safety Program moneys for the three months following the documented incident.

F. MONTHLY INJURY SUMMARY

By the 10th of each month, each employer shall submit to MTA Construction Safety, Metro Monthly Injury Summary (CS-53). This form shall include:

Prime contractors and all subcontractors:

- p. 1. Total hours worked.
- q. 2. Total number Recordable Cases for that month.
- r. 3. Total number of Lost Work Day Cases for that month.
- s. 4. Total Lost Work Days for that month.
- t. 5. Lost Work Days resulting from an injury or illness from a preceding month.
- u. 6. Information on all injuries (name, craft, type injury, disposition, days off and contractor).
- v. 7. The Project Injury Review Committee (Committee), upon receipt of the Monthly Injury Summary, shall review all cases reported. The review shall consist of comparing the employer's report with the Doctors' First Report and release forms.

Should a discrepancy be found during the review by the Committee, the employer will be immediately notified. Restricted Days will be determined by the duty restrictions as indicated by the physician's release forms.

Metro or its' designee will prepare the Project Monthly Injury Report. This report will list all hours and recordable injuries reported by the owner, consultants and contractors assigned to the project for the reporting month.

The Monthly Injury Report shall measure the monthly, year to date, and project to date incident rates of Metro staff assigned to the Construction Project Management Division and each construction management consultant or contractor as well as a project total.

The Monthly Injury Report will be distributed to each employer and to others as required by MTA.

G. REFERENCES - MONTHLY INJURY SUMMARY (CS-53)

CFR Title 29 Part 1904 – Recording and Reporting Occupational Injuries & Illnesses

CFR Title 29 Part 1952.4 Injury and Illness recording & Reporting Requirements

CCR Title 8, Chapter 7 Division of Labor Statistics and Research

9.3 APPENDIX C – SAFETY AND SECURITY SUBMITTAL MATRIX

The table below is for easy reference by the Contractor only and does not supersede the detailed information or requirements found in the referenced section. Work type covered by a required submittal shall not start until the submittal is returned Approved or Approved as Noted to the Contractor.

Submittal Source	Title	When Submitted	When Resubmitted
01 53 23; 1.05.D.1	Worksite Specific Injury and Illness Prevention Program, including: <ul style="list-style-type: none"> • Site Specific Emergency Action Plan • Contractor's New Employee Training and Orientation Program • Site Specific Code of Safe Work Practices 	Between NTP and any On site Construction Work	When conditions change or as required by Metro
01 53 23; 1.05.D.2	Staffing Plan	Between NTP and any On site Construction Work	When conditions change or as required by Metro
01 53 23; 1.05.D.3	Job Hazard Analyses (JHA) Master List	Between NTP and any On site Construction Work	When conditions change or as required by Metro
01 53 23; 1.05.D.4	Qualified or Competent Persons	Between NTP and any On site Construction Work	When conditions change or as required by Metro
01 53 23; 1.05.D.5	Fall Protection Program	Prior to any Work requiring Fall Protection	When conditions change or as required by Metro
01 53 23; 1.05.D.6	Hazardous Waste Operations and Emergency Response	Prior to any Work requiring Hazwoper procedures	When conditions change or as required by Metro
01 53 23; 1.05.D.7	Excavation Action Plans	Prior to any Work on excavations requiring ground support systems	When conditions change or as required by Metro

Submittal Source	Title	When Submitted	When Resubmitted
01 53 23; 1.05.D.8	Crane Certifications	Prior to use of Crane on site	Upon recertification or as required by Metro
01 53 23; 1.05.D.9	Critical Lift Plans	Prior to Critical Lift	Only if initially rejected
01 53 23; 1.05.D.10	Qualified Riggers and Signalers	Prior to the individual performing covered duties	When conditions change or as required by Metro
01 53 23; 1.05.D.11	Energy Isolation Program (Lock Out, Tag Out (LOTO))	Prior to any Work requiring LOTO	When conditions change or as required by Metro
01 53 23; 1.05.D.12	Written Compressed Air Safety Program	Prior to any Work in a compressed air atmosphere	When conditions change or as required by Metro
01 53 23; 1.05.D.13	Written Track Maintenance Plan (Tunnel Construction)	Prior to installation of Tunnel Construction Track	When conditions change or as required by Metro
01 53 23; 1.05.D.14	Confined Space/Underground Emergency Response Team Program	Prior to any Permit Required Confined Space Entry, or Tunnel Construction	When conditions change or as required by Metro
01 53 23; 1.05.D.15	Injury and Incident Reports	At the time of each incident, and Monthly Summary	Only if initially rejected
01 53 23; 1.05.D.16	Materials Hazards Communication Program (Site Specific)	After NTP and before Program implementation	When conditions change or as required by Metro
01 53 35; 1.05.D.1	Worksite Specific Security Plan	Between NTP and establishment of on-site facilities	When conditions change or as required by Metro

Submittal Source	Title	When Submitted	When Resubmitted
CSSM, 4.3.G Spec. Provisions	Safety's First Incentive Program	After NTP and before Program implementation	Only if initially rejected
CSSM, 2.4.A.2	Alternate Safety Coverage Policy – Candidate Roster	After NTP and before Program implementation	When conditions change or as required by Metro
CSSM, 2.4.A.2	Alternate Safety Coverage Policy – Alternate Safety Coverage Request Form (DSR-1)	As required by Alternate Safety Coverage Policy	Only if initially rejected
CSSM, 4.3.E	Alcohol and Drug Free Workplace Program	After NTP and before Program implementation	When conditions change or as required by Metro
CSSM, 4.3.E.8	Alcohol and Drug Free Workplace Program – Monthly Status Report	Monthly after Program implementation	Monthly report, no resubmittal unless rejected

END OF CONSTRUCTION SAFETY & HEALTH MANUAL