



METROLINK

SCRRRA FORM 37

**RULES AND REQUIREMENTS FOR
CONSTRUCTION ON SCRRRA PROPERTY**

MAY 2011



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1.0 GENERAL

1.1 Purpose

The rules and requirements were adopted to protect the Southern California Regional Rail Authority's (SCRRA) operations, including the proper manner of protecting the tracks, signals, fiber optic cables, pipe lines, other Property, and tenants or licensees upon, adjacent to, across (under, and/or over), and along SCRRA and Member Agency Property during the construction and/or maintenance activities on or adjacent to Railway Property.

1.2 Definitions

- SCRRA** Southern California Regional Rail Authority (SCRRA) is a five-county joint powers authority, created pursuant to California Public Utilities Code Section 130255 and California Government Code Sections 6500 et seq., to build and operate the "METROLINK" commuter train system. The five-county member agencies are: Los Angeles County Metropolitan Transportation Authority ("MTA"), Ventura County Transportation Commission, Orange County Transportation Authority, San Bernardino Associated Governments, and Riverside County Transportation Commission. SCRRA builds, operates and maintains a commuter rail system in the five-county area on rail rights-of-way owned by the member agencies.
- Member Agency** The county transportation agency whose property is directly affected by the project. The SCRRA Member Agencies include: the Los Angeles Metropolitan Transportation Authority (METRO), the Orange County Transportation Authority (OCTA), the Riverside County Transportation Commission (RCTC), the San Bernardino Associated Governments (SANBAG) and the Ventura County Transportation Commission (VCTC).
- Property** Property is defined herein to mean the real and/or personal Property of SCRRA or Member Agency(s).
- Contractor** Contractor is an individual, firm, third party, partnership or corporation, or combination thereof, private, municipal or public, including joint ventures, retained by SCRRA or another public entity to provide construction or maintenance services which may impact SCRRA Property and who is referred to throughout this document by singular number and masculine gender.
- Project** The work (products, materials, facilities and improvements as required by the contract) to be performed pursuant to the contract documents.
- Public Agency** Public Agency is defined to mean (i) the federal government and any agencies, departments or subdivisions thereof, and (ii) the State of California or any other state, and any Public Agency, city, city and Public Agency, district, public authority, Public Agency, joint powers,



municipal corporation, or any other political subdivision or public corporation therein.

1.3 General Requirements of the Contractor

All railroad tracks within and adjacent to the Project site are to be assumed active and rail traffic over these tracks must be maintained throughout the Project. Rail traffic may include both through trains and switching moves to local customers. SCRRA and other railroad traffic and operations can occur continuously throughout the day and night on these tracks and may not be interrupted except as approved by SCRRA and the other operating railroads using the tracks. The Contractor shall coordinate and schedule the work so that construction activities do not interfere with rail operations.

The Contractor, and its sub-contractors of any tier (collectively referred to as the Contractor), must coordinate its work with SCRRA during construction of the Project when any of the following conditions are present:

- A. Where work is performed on the right-of-way of SCRRA;
- B. When the work is over or under or adjacent to the tracks of SCRRA;
- C. When excavations are performed within 30-feet of the centerline of the nearest track;
or
- D. When the work has the potential to foul (obstruct) any track or reduce any clearance below the allowable minimum.

The Contractor may not move, relocate, remove, obstruct, or otherwise interfere with any railroad tracks, signals, cables, signs, flags, or other railroad facilities, or any service or connection to any railroad facility. All work on SCRRA tracks, signals, communication equipment, and other railroad facilities must be performed by SCRRA.

The Contractor's ability to enter the SCRRA right-of-way is subject to the absolute right of SCRRA to cause the Contractor's work on the SCRRA right-of-way to cease if, in the sole opinion of SCRRA, the Contractor's activities create a hazard to the SCRRA right-of-way, or SCRRA employees, or SCRRA operations, or any combination thereof.

SCRRA Form 6 - Temporary Right-of-Entry Agreement and this Form 37 are intended to be complimentary. The Contractor shall comply with all requirements stipulated in Temporary Right-of-Entry Agreement, and shall maintain all insurance in full force during the time that its work is performed on or adjacent to the SCRRA right-of-way. Furnishing Railroad Protective Insurance in the amounts listed in SCRRA Form 6 - Temporary Right-of-Entry Agreement is a requirement of working on or adjacent to the SCRRA right-of-way. SCRRA forms, manuals and guidelines are available on its website www.metrolinktrains.com.

The Contractor shall inform itself of the expected train movements over the tracks in the vicinity of the work prior to developing its plans for any portion of the work. The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains.

The Contractor shall provide a detailed construction schedule to SCRRA for review and approval prior to commencement of work within or adjacent to the right-of-way. The Contractor shall use activity codes to identify specific activities that involve work within or



adjacent to the SCRRA right-of-way. Activities that involve working within reduced clearances must also be identified by a unique activity code. This schedule shall be updated for all critical events as necessary but not less than monthly so that site visits may be scheduled at the appropriate times. A copy of each schedule update shall be furnished to SCRRA. The Contractor shall also furnish SCRRA, at the beginning of each week, with a look-ahead schedule projecting the Contractor's activities for three weeks in advance of the week in which the look-ahead schedule is issued.

The Contractor shall perform no work on the SCRRA right-of-way until all its employees, including sub-contractors of any tier, have attended and passed the safety orientation class described in SCRRA Form 6 – Temporary Right-of-Entry Agreement.

The Contractor shall adequately supervise all work performed by its employees and Subcontractors. Subcontractors of any tier, suppliers, owner-operators, and invitees of the Contractor are not recognized as such by SCRRA and are to be considered as employees of the Contractor for the purpose of carrying out the Contractor's obligations while working on, over, or adjacent to the SCRRA right-of-way.

1.4 Submittals

Whenever work is performed within the vicinity of the SCRRA right-of-way, or when work may affect the operation or safety of trains, the method of performing the work shall first be submitted to the SCRRA Representative for approval. Construction submittals requiring SCRRA approval, and Requests for Information (RFI) requiring a reply from SCRRA, must be forwarded to the Public Agency who in turn will forward to the SCRRA Representative. Unless waived by SCRRA, all submittals made to SCRRA must bear an approval stamp indicating the acceptance of the submittal by the Public Agency, and include a statement that the submittal conforms to the requirement and standards of SCRRA included with the Contract. Where required by SCRRA rules, standards, guidelines, and other requirements, the Contractor shall submit plans, calculations and other documents prepared under the direction of a Registered Professional Engineer licensed to practice in California.

As soon as possible, but no later than 15 working days after a Notice to Proceed (NTP) with any portion of the work, the Contractor shall submit for SCRRA's review and approval, a document control plan that describes and illustrates the process (including roles, responsibilities, and contact information) by which the firms and individuals responsible for submitting, reviewing, and approving all submittals from the Contractor to the Public Agency, will manage the flow of submittals and information. The document control plan must also include a master list of submittals. A preliminary list of submittal is included in Exhibit A at the end of this Form. The Contractor shall also submit, not later than 15 working days after the NTP, a testing and inspection plan that identifies the tests and inspections required, the point during construction at which each test or inspection is to be performed, and the entity responsible for performing each test or inspection on both temporary and permanent work.

The details of each construction activity affecting the operations, facilities, or right-of-way of SCRRA, or the operations or facilities of other railroads using the right-of-way, must be described in a Site Specific Work Plan (SSWP) prepared by the Contractor and submitted for review by SCRRA. Requirements for the SSWP are more generally described in Section 4.5, Requesting Work Windows. Written approval must be obtained from SCRRA before such construction is undertaken.



No work shall take place within the SCRRA right-of-way until both the document control and inspection plan have been reviewed and approved by SCRRA. If a change occurs in the process, involvement of firm, or individuals named in the document control and inspection plan, the Contractor shall immediately revise the document control and inspection plan and submit the changes for approval.

SCRRA shall be allowed 20 working days for review of all submittals. Upon written approval by the Public Agency, the Contractor or Contractors may make the submittals directly to SCRRA Representative and the Public Agency simultaneously. However, SCRRA will not approve any submittal for which the approval of Public Agency is required until the Public Agency has first reviewed and approved the Contractor's submittal.

The SCRRA's review and approval of the Public Agency's or the Contractor's plans in no way relieves the Public Agency and Contractor from their responsibilities, obligations or liabilities under the Contract between the Public Agency and the Contractor, or SCRRA Form 6 - Temporary Right-of-Entry Agreement. SCRRA's review and approval will be given with the understanding that SCRRA makes no representations or warranty as to the validity, accuracy, legal compliance or completeness of the designs prepared by Public Agency or the Contractor, and that any reliance by the Public Agency or the Contractor with respect to such designs is at the risk of the Public Agency and the Contractor.

2.0 SCRRA SAFETY SERVICES

2.1 SCRRA Employee- In-Charge (EIC)

Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by the Contractor within or adjacent to the right-of-way of SCRRA must be in compliance with this Form 37 and the requirements of SCRRA Form 6 - Temporary Right-of-Entry Agreement.

The SCRRA Employee-in-Charge (EIC) is responsible for on-track safety anytime that work is underway on or adjacent to the track. Services of an EIC will be provided by SCRRA using railroad personnel trained and qualified under the rules of the Federal Railroad Administration and qualified to work on the SCRRA Subdivision on which they will be providing services. All persons acting as an EIC will be furnished through SCRRA. Personnel of the Contractor may not provide an EIC or perform flagging or other protective services for railroad operations. No work may begin until the EIC is present at the work site and proper protection has been provided.

The EIC will provide job briefings and safety protection to assure the contractor a safe work environment and the safe passage of trains. The EIC will conduct job briefings at the start of every work shift and every change of conditions affecting roadway worker safety during a work shift. The EIC has the authority to temporarily or permanently halt work or to temporarily or permanently remove employees of the Contractor from the right-of-way in order to assure the work is conducted safely. The Contractors' employees must comply immediately with all instructions of the EIC involving work within or affecting the right-of-way of SCRRA.



2.2 Right to Challenge Sufficiency on On-Track Safety

The employees of the Contractor may, during the job briefing process, request clarification of the protection against trains being provided by the EIC. If an employee of the Contractor does not believe that the protection against trains is sufficient, the employee may at any time, in good faith, challenge the form of protection established by the EIC and must remain clear of all tracks until the challenge is resolved. Federal regulations and SCRRRA rules require that the EIC, Contractor supervisor and the SCRRRA supervisor must resolve the challenge before work can begin. A Good Faith Challenge Form must be completed by the parties involved.

If the Contractor disagrees with any instructions from the EIC, the contractor and contractor employees must immediately clear the tracks to a safe location. After employees are clear of tracks, the contractor may contact the EIC’s supervisor to resolve any disagreement over the instruction provided.

2.3 Work Requiring Protection of Track and Operations

The Contractor must request and arrange for an EIC, inspector, or other protective services from SCRRRA for the following conditions:

- A. When the Contractor's work activities are within the right-of-way of SCRRRA.
- B. When the Contractor's work activities are located over or under a track or tracks.
- C. When cranes, pile drivers, drill rigs, concrete pumps, or similar equipment positioned outside of the right-of-way could foul the track in the event of tip-over or other catastrophic occurrence.
- D. When in the opinion of the SCRRRA it is necessary to safeguard the employees, trains, engines and facilities of SCRRRA.
- E. When any excavation is performed below the elevation of the track sub-grade, or track or other railroad facilities may be subject to movement or settlement.
- F. When work in any way interferes with the safe operation of trains at timetable speeds.
- G. When any hazard is presented to railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.
- H. When clearing, grubbing, grading, or blasting is in proximity to the right-of-way which, in the opinion of SCRRRA or representative of an SCRRRA member agency, may endanger the right-of-way or operations.
- I. When street construction and maintenance activities, located within the right-of-way or in the vicinity of the highway-rail grade crossing, requiring temporary work area traffic control, which may affect or create unsafe conditions for employees, public, trains and vehicles.

The services of an EIC are generally provided by one employee. However, additional personnel may be required to protect the facilities and operations of SCRRRA, if deemed necessary by the SCRRRA representative or other authorized SCRRRA employee. The maximum shift duration for one EIC is 10 hours. Under “Form B” protection, the 10 hours includes 8 hours of the Contractor work and 2 hours to install and remove Form B flags. The Contractor shall not be allowed to work within the Operating Envelope during the 2-hour flag installation and removal. The minimum shift duration for flagging services is 4 hours. If the Contractor desires to perform activities requiring an EIC that are longer than 10 hours’ duration, then the Contractor shall coordinate with SCRRRA to schedule multiple EICs for said



Work.

The estimated cost for one (1) EIC is \$1,200 for an eight (8) hour basic day plus two hours of overtime (10 hours total). The estimated cost for each EIC includes vacation allowance, paid holidays, railroad and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging, and supervision. However, the rate for an EIC in effect at the time of performance of the work by the Contractor hereunder will be used to calculate the actual costs of the services of an EIC pursuant to this paragraph. Billing will be on an actual cost basis.

The Contractor shall call the phone number provided with the executed copy of SCRRA Form 6 - Temporary Right-of-Entry Agreement, a minimum of 15 working days in advance of the date that services of an EIC will be required. An EIC will not be scheduled until the Contractor has executed the SCRRA Form 6 - Temporary Right-of-Entry Agreement, and the Contractor has attended the required safety training.

3.0 CONTRACTOR SAFETY REQUIREMENTS

3.1 Contractor General Safety Requirements

Safety takes precedence over deadlines, production schedules, and all other considerations. When uncertainty arises, take the safest course. Remember that accidents are often the result of carelessness, unsafe practices, lack of attention, and complacency.

The following rules must be followed at all times:

- Using, possessing, or working under the influence of alcohol or drugs is not permitted anywhere on railroad property. This includes prescription drugs that cause drowsiness or otherwise impair a person's ability to perform an assigned task. SCRRA may require employees of the Contractor to submit urine or other toxicological samples to be used for drug and alcohol testing after an accident or incident occurring within the railroad right-of-way.
- Any employees, agents or invitees of Contractor or its sub-contractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the SCRRA right-of-way and subsequently released to the custody of a representative of the Contractor's management. An employee removed for violation of the drug or alcohol policy will not be permitted future access to the right-of-way.
- SCRRA may require employees of the Contractor to submit urine samples for drug and alcohol testing after an accident or incident.
- The use or possession of unauthorized radio equipment is prohibited. The use of personal radios (including iPod, MP3 players, and similar devices), and cell phone ear pieces while working is prohibited.
- The use of cellular phones within 25-feet from the nearest rail is prohibited.
- Horseplay, physical altercations, running or jumping is prohibited.
- Firearms or other deadly weapons, including knives are prohibited.
- Work on public streets, roadway crossings, and highway bridges must conform to the California Vehicle Code and the standards given in the California Manual of Uniform Traffic Control Devices, and must be performed with due regard for the convenience and safety of the public.



- Only authorized employees are allowed on engines, cars, cabooses, track cars or other railroad equipment.
- Contractor employees must exercise care to prevent injury to themselves or others.
- Employees must be alert and attentive at all times when performing their work.
- Any defective tools, machinery and equipment are prohibited from use on SCRRRA property and, if found, must be removed immediately.
When on or near the tracks, the following precautions must be taken:
- Keep clear of all tracks unless the EIC has provided a job briefing and identified the On-Track Safety protection in effect. No work may begin until the EIC is present at work site and a job briefing has been conducted.
- Always look both ways before crossing tracks. Always step over the rails when crossing the tracks. Never walk, stand, or sit on the rails. The rail surface can be extremely slippery.
- Always face the direction from which the train or on-track equipment is approaching.
- Avoid track switches. The switch points are controlled from a remote location, can move unexpectedly, and exert enough force to crush ballast rock. Stand 150 feet from track switches when trains are approaching. Stay away from any other railroad device with which you are not familiar.
- Always walk single file when crossing the tracks in a group.
- Never stand between adjacent tracks in multiple track territory when a train is passing.
- Always cross at least 20 feet away from the end of equipment: i.e. engines, railroad cars, or on-track equipment
- Do not pass between standing locomotives, railroad cars or on-track equipment when there is less than 50 feet between the equipment.
- Never cross tracks by going underneath, over or through cars, engines or on-track equipment.
- Work is not allowed within 50 feet of the track centerline while trains are passing the work site. Always stand as far back as possible to prevent injury from flying debris or loose rigging.
- Always visually inspect all passing trains. If you detect a dangerous condition, inform your EIC or watchman immediately. The EIC or watchman will notify the train crew.
- Always stop equipment while a train is passing through your working limits. No movement will be allowed toward an approaching train that would cause the engineer to believe the track might be fouled.
- Trains travel faster than they appear and are relatively quiet. Trains may operate with cab car forward. You should not rely on past experiences to determine train schedule. Train schedules are unpredictable and are subject to changes and/or delays.

Always expect a train on any track at any time. Trains may stop, reverse direction, set out cars, or run around stopped trains without notice. Expect movement of locomotives, railroad cars or on-track equipment on any track in either direction at any time.

3.2 Personnel Protective Equipment

All personnel working on, over, or under the SCRRRA right-of-way must be equipped with personal protective equipment meeting applicable OSHA and ANSI specifications. Personal protective equipment must be appropriate for the task performed. Employees,



subcontractors, suppliers, agents or invitees of Contractor shall possess the following minimum equipment while on the right-of way:

- A. Safety glasses with side shields conforming to ANSI Z87.1 - Occupational and Educational Personal Eye and Face Protection Devices;
- B. Protective Helmets (Hard Hats) conforming to ANSI Z89.1 - Requirements for Protective Headwear for Industrial Workers, Type I or II, Class G or E;
- C. Safety shoes with hardened toes conforming to ANSI Z41.1 – Personal Protection - Protective Footwear. Shoes must lace above the ankle and have a defined heel;
- D. High visibility ORANGE (and only orange) retro-reflective work wear. (Green and Red shirts, vests, or other outerwear are not permitted within the SCRRRA right-of-way because of the use of the same colors for signals to trains).
- E. SCRRRA railroad safety training card in possession.

Hearing protection, face and eye shields, fall protection, gloves, and respirators must be worn as required by State and Federal regulations.

3.3 Maintenance of Work Area

The Contractor must not pile or place any materials, articles, or equipment, nor park any machinery or equipment within the SCRRRA Right-of-Way, or closer than 25'-0" to the center line of the nearest track, or in a manner that blocks access to SCRRRA facilities and equipment. Soil, aggregates, or other similar loose materials must be covered to prevent migration of the material toward the track. Dust or blowing soil or debris must be controlled in accordance with South Coast Air Quality Management District Rule No. 402 and Rule No. 403.

Materials, machinery or equipment must not be stored or left within 250 feet of any highway railroad at-grade crossings, where storage of the same will interfere with the sight distances of motorists approaching the crossing. For construction on the SCRRRA right-of-way the Contractor must establish a storage area with concurrence of the SCRRRA prior to beginning work, or as part of a site specific work plan.

Machines or vehicles must not be left unattended with the engine running. Parked machines and equipment must be turned off and must be in gear with brakes set. If equipped with blade, pan or bucket, the blade, pan or bucket must be lowered to the ground. All machinery and equipment permitted to be left unattended on SCRRRA right-of-way must be left inoperable and secured against movement. Do not park vehicles over vegetation that might be ignited by the heat from the vehicle's exhaust system.

The Contractor must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.

3.4 General Precautions When Working Near Electrical Conductors

All wires and cables must be considered to carry electric current at high voltage and to be dangerous unless informed to the contrary by proper authority. When using temporary power cords, cords must never be placed over the rails, and employees must not place any metal objects across the rails.



For all power lines the minimum clearance between the lines and any part of the equipment or load must be: as shown below:

- 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
- 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
- 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
- 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts

If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means. When the height of overhead wire lines cannot be determined from the available records, the actual height must be determined by field survey.

All damage to the right-of-way, facilities, or property of SCRRA, or any accident or incident within SCRRA right-of-way, or any hazard noticed on passing trains must be reported immediately to the railroad EIC, if an EIC is present, or in the absence of a railroad EIC, to SCRRA's Metrolink Operations Center (MOC) at (888) 446-9715 or (909) 593-0661. Any vehicle or machine which comes in contact with the track, signal equipment, structure or other railroad installation or facility, regardless of the force of the impact, may result in the derailment of a train and must be reported immediately to the SCRRA representative and to the EIC, if an EIC is present, or in the absence of a railroad EIC, to MOC.

3.5 Safety Training and Communication

All personnel working on, over, or adjacent to the SCRRA right-of-way must attend a railroad safety training class and pass an examination covering the information presented in the class. Persons not regularly employed on the project, or at the project site only intermittently, are not exempted from this requirement.

Before beginning any task on the right-of-way of SCRRA, a thorough job safety briefing must be conducted with all personnel involved with the task. The briefing must include the Contractor's job hazard analysis, its plan for conducting the work, and the procedures the Contractor will use to prevent its employees, sub-contractors, suppliers, agents or invitees from moving any equipment adjacent to or across any SCRRA tracks without the appropriate protection for the Contractor and the railroad operations. Additional job safety briefings must be conducted anytime that the job tasks, or conditions affecting the job tasks, change or are revised.

When Contractor employees are required to work on the SCRRA right-of-way after normal working hours or on weekends, the Public Agency and SCRRA Representatives must be notified. A minimum of two Contractor employees must be present at all times. If work is within or near the SCRRA right-of-way an EIC will be required, and a representative of the Public Agency must also be present on the project site.

The Contractor shall develop and provide an emergency action plan indicating the location of the site, contact names and phone numbers, directions for access to the site, instructions for emergency response, and location of the nearest hospitals. The plan must also cover the



Contractor's means of preventing fires arising from the Contractor's operations, and the Contractor's methods of fire suppression. The plan must also include the local direct phone numbers and locations of the nearest fire and police departments. Phone numbers for utility and SCRRA emergency response must be obtained from the SCRRA representative prior to the start of any work and must be posted at the job site.

3.6 Emergency Response and Accident Reporting

Prior to starting work, the Contractor must provide the EIC with the emergency phone numbers for the project. At a minimum, phone numbers must be provided for paramedics, fire, police, utility response, SCRRA Representative, Contractor Superintendent, Metrolink Operation Center (MOC), and the Metrolink Signal emergency number. A map and directions to the site must be immediately available for the use of the EIC.

In emergency situations the following apply:

- A. When a person is injured, stop work and ensure everything possible is done for the injured person. Also take the following immediate action: Notify the fire, police, or paramedics as appropriate, and notify the Metrolink Operations Center; provide an individual or individuals to guide emergency response personnel to the site; make sure that all access ways are cleared for emergency vehicle access; and immediately report to the EIC any accidents, personal injuries, defects in tracks, bridges, signals utilities or communication facilities or any unusual condition that may affect the safe operation of the railroad.
- B. If equipment was involved in the incident, it must not be moved until examined to ensure the equipment was in proper working condition, unless movement is necessary to prevent further injury or risk to persons or property.
- C. In case of personal injury, loss of life, or damage to property, the EIC must immediately document the names, addresses and occupation of all persons involved, including all persons at the scene regardless of whether these persons give a statement about the incident. This information should be included in the incident reports. The Contractor's cooperation with, and assistance to, the EIC is a requirement of accessing the SCRRA right-of-way.
- D. If an incident causes personal injury or death, all tools, machinery and other equipment involved, including premises where such accident occurred must be promptly inspected by the EIC. Tools, equipment and machinery must be secured until the EIC, Safety Officer, or other competent person has completed an inspection. A report of such inspection, stating the conditions found and names of persons making the inspection must be promptly forwarded to SCRRA and the supervising officer of person making the inspection.

Information concerning incidents or personal injuries occurring to persons who are not employees, must not be given to anyone except authorized representatives of the SCRRA or an officer of the law.

4.0 TRACK OCCUPANCY AND WORK WINDOWS

4.1 Description of Location and Traffic

The Contractor shall obtain permission in writing from SCRRA for movement of equipment on track or across tracks at locations other than public crossings. Such permission may not



necessarily be granted. Damages to the track structure will be repaired at the Contractor's sole expense.

The mainline tracks, within the limits of Project site, are under direct control of SCRRA dispatcher. No track shall be fouled without authorization and presence of an Authority EIC on the scene. For all work with the potential to foul the track, the Contractor shall allow sufficient time in his work schedule for the EIC to clear trains. Up to 15 minutes may be required for the EIC to clear each train, during which time the Contractor must not foul the track. Such time required to clear scheduled trains shall not be an acceptable reason for submitting contract change requests or delay claims to SCRRA. Scheduled trains may be up to 15 minutes behind schedule, and such tardiness will not be an acceptable reason for submitting contract change requests or delay claims to SCRRA.

4.2 Coordination with Rail Traffic

The Contractor's operations are subordinate to the operation of trains on the SCRRA right-of-way, whether passenger or freight. All work upon the SCRRA right-of-way shall be done at such times and in such a manner as to not interfere with or endanger the SCRRA Operations. SCRRA will strive to cooperate with the Contractor such that the work may be handled and performed in an efficient manner. However, the Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event its work is delayed by rail operations.

All forecasts of train traffic and schedules are approximate. The public time table or schedule shall be used for planning purposes only and shall not be used for scheduling actual work in the vicinity of the railroad tracks in the absence of a railroad EIC. SCRRA, UPRR, BNSF, and Amtrak may run additional trains as needed to perform their respective obligations. The operation of extra and special trains will be at sole discretion of SCRRA. The Contractor's work may be halted or delayed whenever necessary to accommodate train service.

Persons acting as an EIC are generally dispatched to projects in the order requested. An EIC may not be available at all times without advance notice. The Contractor is encouraged to schedule the services of an EIC or inspector a minimum of 15 working days in advance of any planned operation to avoid delay. Any work to be performed by the Contractor, which requires services of an EIC or inspector, shall be deferred until an EIC or inspector is available at the job site.

4.3 Conditional Work Windows and Track Access

All work on, over, or adjacent to the tracks must be coordinated with SCRRA, and the Contractor's work is subject to the SCRRA operating rules for work on main tracks and other than main tracks.

Work Window: A period of time with specific beginning and ending time and durations for which the track, signals, bridges and other Operating System elements within the Operating Envelope are temporarily removed from service or modified in some other manner and train and other operations suspended or modified to allow construction or maintenance work to occur. Written authority from the Authority and an approved Site Specific Work Plan (SSWP) is required before the Contractor is granted a Work Window. The Contractor's Work Window



shall have specific geographic limits, which are defined in the approved SSWP. Modifications or suspension of train and on-track equipment movements resulting from a Work Window involves written changes to the Railroad's Rules of Train and On-Track Equipment Operations.

Exclusive Track Window: An approved Work Window in which no train movements (except the Contractor or Authority work trains or equipment under control of the EIC, per the SSWP) will operate on any track within the window limits. The Contractor may dismantle, remove, reconstruct, or otherwise obstruct tracks within the limits of such a window. This Work may be protected by track out of service, track and time limits, or by Form B Track Bulletin.

Limited Track Window: An approved Work Window for some, but not all tracks within a general Work area (e.g. one track remains for operation of trains, other tracks are available for the Contractor's Work). Movement of trains over the track(s) of a Limited Track Window is under the control of the EIC who will not authorize train movement unless and until the Contractor personnel and equipment are clear of the operating track. The Contractor may remove, construct, or obstruct only the track designated by the SSWP and must arrange the Work so that trains can operate without delay on the remaining track(s) in the Work area. This Work may be protected by track out of service, track and time, or by Form B Track Bulletin.

"Form B" Work Window: An approved Work Window in which passenger, freight and all other trains and on-track equipment movements can be prohibited from entering the defined limits of a segment of track. The "Form B" Work Window does not allow the Contractor to remove from service or modify the tracks, signals, bridges, stations or other elements of the Operating System in a manner, which will delay or in any way affect the safe operation of the trains. The "Form B" Work Window allows the Contractor the ability to enter the Operating Envelope and perform construction activities subject to the conditions above. An Employee-in-Charge/Flagman from the Authority will exercise strict control over the Contractor's construction activities in conjunction with Roadway Worker Protection requirements, to assure that the Contractor's activities do not delay or impact train service.

4.4 Requesting Work Windows

The Contractor shall make requests in writing to the SCRRA Representative for Conditional Work Windows not less than fifteen (15) working days in advance of the desired Conditional Work Windows. Seventy-five (75) days advance notice is required for requesting a Work Window on all tracks.

The written request must include:

- A. Description of work to be performed;
- B. Description of tasks, equipment utilized, and sequence of work;
- C. The exact location of the work and proximity to the tracks;
- D. Drawing (to scale) illustrating the work, equipment locations, lay-down, and staging areas;
- E. Drawings illustrating Temporary Traffic Control in vicinity of tracks;
- F. Drawings showing truck routes, truck staging, and method of truck control;
- G. Description, including drawings and calculations where appropriate, of the method of securing and supporting temporary structures or permanent construction that will not



- stand without support;
- H. The type of railroad work window and amount of time requested;
- I. Schedule, by hour, for the days and hours that work will be performed;
- J. The designated contact person for the Contractor;

4.5 Extraordinary Work

Should a condition arise from, or in connection with, the Contractor's work on the Project which requires immediate and extraordinary actions to be taken to protect operations and facilities of SCRRA, or facilities of others within the right-of-way, the Contractor shall undertake such actions. If, in the judgment of the SCRRA or the Public Agency, such actions are insufficient, SCRRA may require or provide such actions as deemed necessary. In any event, such actions shall be at the Contractor's expense and without cost to SCRRA. SCRRA or Public Agency shall have the right to order the Contractor to temporarily cease operations in the event of an emergency or if, in the opinion of SCRRA or Public Agency, the Contractor's operations may interfere or endanger train operations.

5.0 CONSTRUCTION

5.1 Demolition and Removal

Where structures over or adjacent to the tracks are to be demolished, the tracks must be protected from damage during the demolition. The Contractor may employ either of the following methods:

- A. During demolition of a bridge deck or overhead structure, a protection shield must be erected over the track to catch falling debris. The protection shield shall be supported from girders or beams and shall not be lower than the allowed temporary clearance from the top of rail. The deck must be removed by cutting into sections and lifting out. All cranes, hoists, winches, and hardware used in connection with the demolition are to include a factor of safety of 150% in addition to the safe working load of the equipment or hardware. Large pieces of deck or other portions of the structure must be handled individually and must not be allowed to fall on protection shield or onto the ground.
- B. When an overhead protection shield cannot be installed due to limited clearance or type of superstructure, the track may be protected by timber mats placed over the track structure, subject to approval by SCRRA. Timber mats shall be made in sections such that they may be lifted in and out as a unit quickly. Mats must not rest on ties or rails. Geofabric or canvas must be placed over the track structure to keep the ballast clean. The mats and ballast protection are to extend 25-ft beyond the existing limits of the overhead bridge or structure. Equipment used in demolition operations may not be operated on or over unprotected track. Blasting will not be permitted to demolish a structure over or within railroad right-of-way.

The Contractor shall submit detailed SSWP and plans of the protection shield or the timber mats to the SCRRA Representative for approval prior to the start of demolition. The plans shall also indicate the location and capacity of the proposed cranes and estimated lifting loads. The lifting plans shall be prepared by a Registered Professional Engineer and shall bear his seal and signature.



The Contractor shall provide timely communication to the SCRRA Representative when scheduling the demolition-related work so that the representative or their designee may be present during the entire demolition procedure.

At any time during demolition activities, the SCRRA Representative may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or SCRRA facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the satisfaction of the SCRRA Representative. SCRRA shall not be responsible for any additional costs or time claims necessitated by the above events.

5.2 Excavation and Backfill

All excavations must be conducted in compliance with applicable law and regulations and, regardless of depth, must be shored when within the zone of influence from the railroad loading, or when necessary to protect structures, facilities, or personnel. Shoring for excavations must comply with the SCRRA "Excavation Support Guidelines." Any excavations, holes or trenches on the SCRRA right-of-way must be covered, guarded and protected when work is not actively prosecuted. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that SCRRA employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be backfilled as quickly as practicable.

The Contractor shall submit a plan showing the limits of all excavations within the Right-of-Way of SCRRA, and the method of support when support is required. The Contractor shall not make any excavations on the SCRRA right-of-way, or within the zone of railroad load influence as defined in Figure 2-1 of the SCRRA "Excavation Support Guidelines", until the Contractor's excavation plan, and its plans and calculations for the support of the excavation are approved in writing by SCRRA.

The Contractor must cease all work and notify SCRRA immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the utility owner immediately. The Contractor shall not perform any work if there is any doubt about the location of underground cables or lines of any kind until the exact location of the underground facilities has been determined. There will be no exceptions to these requirements.

The Contractor shall compact all backfill within the SCRRA Right-of-Way to a minimum of 90 percent of maximum standard density in accordance with AASHTO T-99 or ASTM D-698. Where it becomes necessary to excavate beyond the normal lines of excavation to remove boulders or other interfering objects, the voids remaining after such materials are removed must be back-filled with suitable material approved by SCRRA. The material obtained from the project excavation may be used as fill or backfill, provided that all organic material, rubbish, debris, large rocks, and other deleterious or objectionable materials are removed. Any excess material must be disposed of hauling off-site. The excess material must not be piled-up or scattered on the right-of-way.

The Contractor shall perform excavation and grading so that the finished surfaces are in



uniform planes with no abrupt breaks in surface and having positive drainage on the right-of-way away from the track structure, and to approved catchment areas.

5.3 Shoring and Support of Excavation

Shoring, cribbing and sheeting designed to support excavations or embankments shall be designed to support all lateral forces caused by the earth, vehicular traffic, construction equipment, temporary and permanent structures, and other surcharge loads in the vicinity of the excavation. Support or shoring located on the SCRRA right-of-way, or within the zone of influence from railroad loading, shall conform to the SCRRA Excavation Support Guidelines. Designs for all temporary structures supporting tracks, or excavations adjacent to the tracks and within the zone of influence from railroad loading, shall include railway surcharge loading imposed by a Cooper E-80 live load. Any excavation adjacent to track must be covered and provide a uniform path and include with standard handrails when work is not actively underway.

The Contractor shall submit a detailed SSWP drawings and supporting calculations for any temporary support of excavation for SCRRA review and approval. For the installation of temporary or permanent shoring systems, including soldier piles and lagging, or interlocked steel sheeting on or adjacent to SCRRA's right-of-way, lateral deflection of the shoring system plus top of rail monitoring is required. The frequency of monitoring must comply with the SCRRA "Excavation Support Guidelines." The monitoring program must identify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. The Contractor must submit the monitoring program for the track, roadbed, and shoring for review and approval prior to starting work.

The monitoring survey data must be collected at the approved frequency and immediately furnished to the SCRRA Representative for review. If SCRRA determines that any movement has occurred in the track or supporting structure, SCRRA will notify the Contractor and the Contractor shall immediately take all necessary steps to correct the movement or settlement. SCRRA, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, or to have the excavated area immediately backfilled, or to perform additional investigations to determine what corrective action is required, or any combination thereof. SCRRA may modify the survey locations and monitoring frequency as it deems necessary during the project. Any corrective action required by SCRRA or performed by SCRRA, including the monitoring of corrective action of the Contractor, will be at the cost and expense of the Contractor.

5.4 Drilling and Pile Driving

The Contractor must take special precaution and care, in connection with drilling or driving piles or sheets adjacent to tracks, to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The Contractor shall submit detailed SSWO and plans of the Drilling and Pile Driving Operations to the SCRRA Representative for approval prior to the start of drilling and pile driving.

Pile driving must be carried out so that it does not interfere or endanger train operations. An EIC must be present whenever pile driving or drilling is underway in the vicinity of the SCRRA track. Equipment must be positioned so that no part of machine swings over the



track or infringes within 25-ft of the nearest rail without first obtaining permission from SCRRA and SCRRA has established an appropriate work window.

Piles must be secured independently of the hammer or vibrator at all times while driving until sufficiently anchored in the soil such that the pile will stand without external support during the completion of the driving. Reinforcing steel cages or other internal structural supports in concrete structures must be designed to withstand all loads imposed in handling and setting. A crane must remain attached to the reinforcing steel cage until the reinforcing steel cage is guyed or braced to prevent movement unless it can be demonstrated that the cage or support will resist all loads which may be imposed without collapse or failing.

Large diameter holes and shafts within the zone of influence from railroad loads must be cased to prevent caving and loss of support adjacent to the tracks. If caving occurs, the hole must immediately be filled until additional casing can be advanced in the hole before drilling is continued.

5.5 Boring and Jacking

The face of all jacking and receiving pits shall be located outside of the SCRRA right-of-way, or a minimum of 25 feet from the center line of the nearest track, measured at right angle to the track, whichever is greater unless otherwise approved by SCRRA. The use of trench boxes may be permitted for jacking and receiving pits, however, trench boxes, shields, and hydraulic shores are not acceptable inside the zone of influence from railroad loading. Design of the temporary supports for the jacking and receiving pits must conform to the requirements of the SCRRA "Excavation Support Guidelines."

Boring and jacking of casings and other conduits must conform to the requirements of SCRRA Engineering Standard ES5001 and ES5002. For any conduit that is bored or jacked under the track, the Contractor must guarantee the work against settlement for two years after the completion of the work, and must furnish a performance bond against failure or settlement of the soil around the jacked pipe or casing in the amount shown in the following table:

Casing Diameter	Bond Amount	Casing Diameter	Bond Amount
<12"	\$45,000	80"	\$315,000
24"	\$90,000	96"	\$360,000
36"	\$135,000	108"	\$405,000
48"	\$180,000	120"	\$450,000
60"	\$225,000	132"	\$495,000
72"	\$270,000	144"	\$540,000

The Contractor shall submit detailed SSWP and plans for jacking and boring operations, including the design of temporary supports for the jacking and receiving pits, to the SCRRA Representative for approval prior to the start of any work.



5.6 Temporary Structures

Formwork, falsework, guying, bracing, and other temporary structures must be designed to resist all imposed construction live and dead loads including wind and seismic loads. Railroad track, structures, equipment, or other railroad facilities may not be used to secure or brace temporary or permanent structures during construction.

Designs for falsework above any tracks shall conform to the SCRRA Grade Separation Guidelines and the Caltrans Falsework Manual. Falsework over or adjacent to railroad tracks shall meet the requirements in the Caltrans Falsework Manual for falsework over traffic (traffic openings). The additional provisions stipulated the "*Guidelines for Design of Falsework for Structures Over Railroad in Connection with Highway Grade Separation Construction*," issued by the Southern Pacific Lines (Falsework Memo No. 7) shall be included in all designs of falsework over SCRRA tracks. Collision posts are required.

The Contractor shall submit a detailed SSWP and procedure for erecting and removal of the falsework spans over railroad tracks. Equipment used for the erection, or removal of structures over railroad facilities, shall have a minimum lifting capacity of one hundred-sixty seven percent (167%) of the lift weight (operational capacity limited to sixty percent (60%) of the tipping load or the boom structural load). The procedure shall indicate the capacity of cranes, location of cranes with respect to the tracks and estimated lifting loads. The erection procedure must be prepared by a California Registered Professional Engineer and shall bear his or her seal and signature. The procedure must be approved by SCRRA.

The Contractor shall furnish, to the SCRRA Representative, four sets of working drawings and a copies of the Contractor's plans illustrating and describing the details of construction affecting SCRRA Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, The Contractor shall also furnish two sets of structural calculations of any falsework, shoring or cribbing. A registered professional engineer licensed to practice in the State of California shall seal and sign all drawings and calculations. The Contractor shall not begin work until SCRRA has reviewed and approved the plans.

5.7 Hoisting Operations

The Contractor shall submit a detailed SSWP and procedure for any crane, mast, or boom operations, on, over, or adjacent to the SCRRA right-of-way to the SCRRA Representative for approval prior to the start of hoisting operations. The Contractor shall submit four (4) copies of the detailed procedure for erection of the proposed structures over or adjacent to SCRRA's tracks or right-of-way. This procedure shall include a plan showing the locations of cranes, horizontally and vertically, operating radii, with staging locations shown, including beam placement on ground or truck unloading staging plan. Plan should also include the location of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions. No crane or equipment may be set on the SCRRA rails or track structure.

The following additional information must be included in the submittal as applicable:



- A. All as-built bridge seats and top of rail elevations shall be furnished to SCRRRA Representative for review and verification at least 30 days in advance of construction or erection, to ensure that minimum vertical clearances as approved in the plans will be achieved. Computations must be made for the weight of the materials, articles or equipment being lifted must be submitted. Computations shall be made from plans of the structural members being erected and those plans or sections thereof shall also be included in the submittal; the weight shall include the weight of concrete or other materials including lifting rigging.
- B. Crane rating sheets showing cranes to be adequate for 167% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted. Safety factors that are included by the manufacturer in the crane charts are not to be considered when determining the 167% additional capacity.
- C. A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets for specialized equipment. All specific components proposed for use shall be clearly identified and highlighted in the submitted documents. The safe working load capacity of the connecting equipment shall be 167% above the calculated weight of the pick.
- D. A complete written procedure is to be included that describes the sequence of events, indicating the order of lifts and any repositioning or reconnecting of the crane or cranes.
- E. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical sub tasks (e.g., performing aerial splices, installing temporary bracing, etc.) shall be furnished so that the potential impact to SCRRRA operations may be assessed and eliminated or minimized.
- F. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
- G. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail or collision post will be required to be installed in a track where a temporary bent is located within fifteen (15) feet from the centerline of that track.
- H. The proposed erection procedure must be approved by the SCRRRA Representative prior to undertaking work on the project.
- I. The Contractor shall provide timely communication to the SCRRRA Representative when scheduling the erection-related work so that the SCRRRA Representative may be present during the entire erection procedure.
- J. At any time during construction activities, the SCRRRA Representative may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or SCRRRA facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the satisfaction of the SCRRRA Representative. SCRRRA shall not be responsible for any additional costs or time claims associated with such revisions.

5.8 Clearances

The Contractor must not pile or store any materials, machinery or equipment closer than 25'-



0" to the center line of the nearest SCRRA track, and only then with the permission of SCRRA. Materials, machinery or equipment must not be stored or left within 250 feet of any highway railroad at-grade crossings, where storage of the same will interfere with the sight distances of motorists approaching the crossing. Prior to the start of work, the Contractor must establish a storage area with concurrence of the SCRRA representative.

Unless shown otherwise on the Contract Drawings and approved by SCRRA, the Contractor shall abide by the following temporary clearances during construction. The Contractor shall not place forms, materials, spoils, or other temporary construction, including bracing or work platforms, within the clear area defined below unless approved in writing by SCRRA:

- 12' -0" Horizontally at right angles from centerline of nearest track
- 22' -6" Vertically above the top of the highest rail

At no time may the Contractor reduce the minimum clearances required by the California Public Utilities Commission (CPUC) General Order 26-D, or block or restrict the visibility of any signal or railroad warning device. Any infringement within the clearances established by General Order 26-D due to the Contractor's operations must be submitted to SCRRA and the operating railroads, and must not be undertaken until approved in writing by SCRRA, and until SCRRA has obtained any necessary authorization from the CPUC for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending approval by SCRRA, the operating railroads, or the CPUC as applicable.

In the case of impaired vertical clearance above top of rail, SCRRA will have the option of installing tell-tales or other protective devices SCRRA deems necessary for protection of SCRRA operations. The cost of tell-tales or protective devices will be borne by the Contractor.

Reduced temporary construction clearances, which are less than construction clearances defined above, will require special review and approval by SCRRA and, if less than the statutory minimum, the CPUC. Any proposed variance on the specified minimum clearances due to the Contractor's operations shall be submitted to the SCRRA Representative and the Public Agency at least thirty (30) working days in advance of the work. No work shall be undertaken until the variance is approved in writing by the SCRRA Representative.

Parallel to the outer side of each exterior track of multiple operated tracks and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending in width not less than twelve feet (12') perpendicular from centerline of track, must be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during working hours must be covered, guarded and/or protected as soon as practicable. Walkways with railings shall be constructed by the Contractor over open excavation areas when in close proximity of track, and railings shall not be closer than 9' -0" perpendicular from the center line of tangent track or 10' - 0" horizontal from curved track.

5.9 Temporary Vehicular Traffic Control

The Contractor's operations which control traffic across or around SCRRA facilities shall be coordinated with and approved by both SCRRA and Public Agency, and shall be in compliance with Section 21400 et seq. of the California Vehicle Code and the California



Manual of Uniform Traffic Control Devices (California MUTCD). Traffic control in the vicinity of highway - railroad grade crossings shall conform to the Section 6G-19 of the California MUTCD and SCRRA Standard ES4301. The Contractor shall perform no work at, or in the vicinity of a highway-railroad grade crossing without the presence of a railroad EIC, notwithstanding that the work of the Contractor may not be physically located on the SCRRA Right-of-Way.

SCRRA will not permit temporary at-grade crossings unless absolutely necessary and there is no practicable alternative route available to Contractor to access the Project site. Temporary crossings, if permitted, must conform to SCRRA Standard ES4302. All work at temporary crossings that lies between the rails and within 8.5 feet of the center line of the track on each side must be performed by SCRRA at the cost and expense of the Contractor.

The Contractor must comply with all traffic control signs and other devices within SCRRA facilities, and must observe a maximum speed limit of 20 mph within the SCRRA Right-of-Way. Disregard for posted traffic control signs and devices, or excessive speed within the SCRRA Right-of-Way may lead to revocation of access for the offending individual.

6.0 UTILITIES

6.1 Protection of Underground Facilities

Signal, communication, fiber-optic, petroleum, natural gas, electric power and other utilities are present in the SCRRA right-of-way. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits, danger to train operations, and release of potentially hazardous or flammable compounds. The Contractor must take special precautions and care in connection with excavating, shoring, and other subsurface construction to avoid damage to subsurface facilities.

Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems, are present and located within the Project work area by calling the Southern California Underground Service Alert at 811. SCRRA is not a member of Underground Service Alert (DigAlert) and SCRRA signal and communication lines must be located by contacting the SCRRA Signal Department.

All underground and overhead wires must be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating. Individual owners of utilities may require that an inspector employed by the utility owner be present during any excavation near the utility.

In addition to calling the Southern California Underground Service Alert (Dig Alert), the Contractor shall call the SCRRA's "Call Before You Dig" number at least 72 hours prior to commencing work at (909) 859-4100 or (909) 859-4112 during normal business hours. In case of emergencies involving SCRRA signal or communication facilities, the Contractor shall call (888) 446-9721. The signal and communication emergency phone line is staffed 24 hours a day, 7 days a week. If a telecommunications system is buried anywhere on or near SCRRA right-of-way, the Contractor will coordinate with SCRRA and the telecommunication company to arrange for relocation or other protection of the system prior to beginning any



work on or near SCRRA right-of-way. Notice must be given to the freight railroads and fiber optic companies not less than 72 hours prior to work by calling to permit them to arrange for the location or protection of any lines under their control.

It is the responsibility of the Contractor to make arrangements directly with utility companies involving the protection, encasement, reinforcement, relocation, replacement, removing or abandonment in place of non-railroad facilities affected by the Project. SCRRA has no obligation to supply additional SCRRA right-of-way for non-railroad facilities affected by this Project, nor does SCRRA have any obligation to permit non railroad facilities to be abandoned in place or relocated on SCRRA's right-of-way. Any facility or utility that crosses SCRRA right-of-way must be covered under an agreement or license obtained through SCRRA including, without limitation, any relocation of an existing facility or utility.

SCRRA will, if required, rearrange its communications and signal lines, grade crossing warning devices, train signals, tracks and facilities that are in use and maintained by SCRRA forces in connection with its operation. This work by the SCRRA will be done by its own forces or by contractors under a continuing contract and is not a part of the work under the Contract for the construction of the Project. The Contractor must allow sufficient time in its schedule to permit SCRRA to issue the necessary task orders to its contractors order material, and perform any necessary work.

7.0 HAZARDOUS AND CONTAMINATED MATERIALS

7.1 Discharge

Discharge, release or spill on the SCRRA right-of-way of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the SCRRA Representative of any discharge, release or spills in excess of a reportable quantity. The Contractor must not allow SCRRA Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.

7.2 Notification, Control and Disposal

If the Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including any non-containerized commodity or material, on or adjacent to the SCRRA right-of-way, in or near any surface water, swamp, wetlands or waterways adjacent to the right-of-way, while performing any work on this Project, the Contractor must immediately: (a) notify the Public Agency 's Resident Engineer and the SCRRA Representative, of such discovery; (b) take safeguards necessary to protect its employees, sub-contractors, agents and third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

8.0 INSPECTION AND OBSERVATION

8.1 Site Inspections by SCRRA and Others

In addition to the office reviews of construction submittals, site observations will be performed by SCRRA or its designee at significant points during construction as determined



by SCRRA. Site visits to observe the progress of the work may be performed at any time throughout the construction process as deemed necessary by SCRRA.

Federal or State representatives may also conduct inspections and tests to verify compliance with laws and regulations. SCRRA maintains an Efficiency Testing program to verify the effectiveness of the Contractor's compliance with 49 CFR 214 – Railroad Workplace Safety regulations and SCRRA third party work rules.

8.2 SCRRA Efficiency Tests

SCRRA representatives may make inspections and conduct tests to judge the effectiveness of the safety training, and compliance with SCRRA requirements. The Contractor shall cooperate with SCRRA, Federal, and State representatives at all times. Disregard for, or failure to comply with, the requirements of 49 CFR 214 – Railroad Workplace Safety regulations, or SCRRA third-party safety requirements may result in the removal of an offending individual from the SCRRA Right-of-Way. Egregious or repeated disregard for any safety rule or requirement may result in the termination of the Contractor's Right-of-Entry Agreement.

8.3 Scope of Inspections and Observations

Inspections by SCRRA will be for compliance with SCRRA standards, guidelines, rules, and agreements, and will generally be limited to the work of the Contractor within or near the SCRRA right-of-way. Notwithstanding any inspection or site visit by SCRRA, responsibility for compliance with the Contract between the Contractor and the Public Agency, local codes and ordinances, SCRRA standards and guidelines, and for the inspection of temporary and permanent work and other work site inspections, resides with the Public Agency and the Contractor. SCRRA by its inspections and comments makes no representations and offers no warranty as to the completeness, accuracy, degree of conformance to codes, compliance with the Contract or local codes or ordinances.

9.0 CLEANING AND RESTORATION

9.1 Cleaning of Right-of-Way

The Contractor shall, upon completion of the work, promptly remove all of the Contractor's tools, implements and other materials whether brought upon the right-of-way by the Contractor or any sub-contractor, employee, supplier, or agent of the Contractor. The Contractor shall also restore the right-of-way of SCRRA, and make arrangements with SCRRA to restore the tracks, wire lines, signals, and other facilities of SCRRA. The Contractor shall leave the premises in a clean and presentable state equal to or better than existed at the start of the project work. All areas must be graded to drain away from the tracks, all fences or other barriers that have been damaged during the work, or removed to facilitate the work, must be replaced with new fencing of an equivalent character. Where the project improvements intersect the natural flow of the runoff, the contractor shall provide facilities for the proper collection, conveyance, and disposal of water reaching the interfering improvement.

EXHIBIT A
CONTRACTOR SUBMITTAL CHECKLIST

SECTION	DESCRIPTION	ARTICLE
Section 1	Temporary Right-of-Entry Agreement	1.3
Section 1	Insurance Certificates	1.3
Section 1	Construction Schedule	1.4
Section 1	Weekly Look-Ahead Schedule	1.4
Section 1	Document Control Plan	1.4
Section 1	Testing and Inspection Plan	1.4
Section 1	Site Specific Work Plans	1.4
Section 5	Demolition and Removal Plans	5.1
Section 5	Excavation and Backfill Plans	5.2
Section 5	Shoring and Support of Excavation Plans	5.3
Section 5	Shoring and Support of Excavations Removal Plans	5.3
Section 5	Track Monitoring Plan	5.3
Section 5	Drilling and Pile Driving Plans	5.4
Section 5	Boring and Jacking Plans	5.5
Section 5	Boring and Jacking Track Monitoring Plan	5.5
Section 5	Temporary Structures Plans	5.6
Section 5	Falsework Design Plans	5.6
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Section 6	Falsework Removal Plan	5.6
Section 5	Hoisting Plans	5.7
Section 5	Clearances	5.8
Section 5	Temporary Traffic Control Plans	5.9

END SECTION