

SAR



CONTENTS

1. INT	RODUCTION	
1.1.	Scope	
1.2.	Permit Team Charter	5
1.3.	Outside Party Charter	6
1.4.	Disclaimer:	
1.5.	Abbreviations	8
1.6.	Definitions	9
2. SA	AR COMPETENCY REQUIREMENTS	11
3. IN:	SURANCE REQUIREMENTS	12
4. SA	AR WORK PERMIT REQUIREMENTS	13
5. TE	CHNICAL REQUIREMENTS	16
5.1	Bridge Construction:	16
5.2	Culvert & Bridge Construction under the Railways	17
5.3	Bridge Construction over the SAR Railways	18
5.4	HDD Method/ Micro Tunnelling Method Crossing under SAR Railways	19
5.5	Any Crossing under SAR Railways (Open Cut or HDD/ Micro Tunnelling)	22
5.6	OHTL Crossing in SAR Railways	23
5.7	Heavy Vehicle Crossing in SAR Railways	23
5.8	Construction near SAR Railways	25
5.9	Tenants Installation in SAR facilities	25
5.10	Works Interfacing with SAR Assets/ Facilities	26
6. SA	AR RIGHT OF WAY (ROW)	27
7. SA	R NETWORK INFORMATION	28
8. PE	RMIT VALIDITY AND EXTENSION	29
9. SA	R WORK PERMIT CONDITIONS	
10. P	ERMIT CLOSURE / HANDOVER	34

1. INTRODUCTION

This document provides guidance to Outside Parties who will carry out work on, under or adjacent to SAR infrastructure, to enable them to successfully deliver the project by eliminating or reducing risks to the safety and performance of SAR Network. It also aims to minimize, so far as is reasonably practicable, the impact of Outside Parties works on future operation and maintenance costs and liabilities.

1.1. Scope

This document applies to the SAR North South Railway (NSR) and East West Railway (EWR) network only.

The guidance covers all work by Outside Parties that can influence the SAR railway, including stations and other lands. For example, HDD/Micro Tunneling, Bridge & Culvert construction, general construction, excavations, demolition, installation of public utilities and other services including underground and overhead pipes and cables, surveys, ground investigation works and general access.

The primary concerns of SAR with regards to Outside Party development work are:

- Safety of passengers, railway staff and the public when using SAR premises or designated land.
- Safety and stability of the track, train operation, running tunnels, overhead electrified lines, embankments, cuttings, and structures.
- Maintenance of dimensional clearances.
- Protection of railway equipment and assets.
- Prevent unauthorized access.
- Unauthorize work on or near SAR land without approval.
- Risks from plant such as cranes and piling rigs within a collapse radius of the SAR infrastructure.
- Lines of sight to signals and avoidance of glare affecting train drivers.
- Risks from flood, windblown debris, and unexploded ordnance.
- Avoiding additional maintenance or other liabilities/obligations; and
- Any covenants or safequarded zones in favor of SAR

1.2. Permit Team Charter

SAR is committed to managing the impact on SAR property and operations from the works of outside parties. We are concerned that this work will go ahead to the satisfaction of both parties and of our client.

This involves a pact between you – as the developer – and us.

What are our imperatives:

- Safeguard the railway against accidents, incidents or near misses caused by outside party's work.
- Recognize any changes in long-term costs and risks to SAR resulting from outside parties' schemes.
- Comply with KSA statute law and standards where appropriate

What we need from you:

- To be professional and straightforward.
- Understand our imperatives.
- Comprehend our guidance notes and other communications, and act on them.
- Plan your submissions and submit them in good time with complete documentation.
- Consult with us on any network access at a very early stage.
- Know who to communicate within our team.

What to expect from us:

- Act in a professional, knowledgeable, and competent way.
- Try to understand your needs.
- Communicate effectively with you by being approachable, responsive, and giving straight answers.
- Deliver to deadlines.
- Exhibit safe behavior.

Feedback:

 We have a feedback process in which we ask outside parties of significant schemes to be involved in. Please take the time to do this.

1.3. Outside Party Charter

SAR expectation from the Outside Parties to ensure safe delivery of project and ensure following.

- Providing comprehensive details upon initial request for permit approval.
- Acting in accordance with agreed SAR permit requirements.
- Provide project scope definition and identification of any potential railway impact(s).
- Following relevant SAR standards while working within SAR property specifically SAR HSE policy, standards, and railway operating rules.
- All representatives are briefed and familiar with the exact location of the proposed work.
- For any large infrastructure project which significantly impact environment such as
 Drainage system, Utilities enhancement will require submission of approved EIA report for
 that project and compliance with NCEC regulations, EPC, HSE approval and other standards
 as require by the law.
- For small project/construction work, environmental aspects need to be considered and reflected in the WARA (Work Activity Risk Assessment) form to ensure environmental hazards and associated risk have been addressed with suitable control measures.
- It is the responsibility of the outside party and their contractor to ensure that they
 understand and comply with SAR requirements and rules when working on SAR
 infrastructure. If any requirements or rules are not understood within this document, then
 must seek clarification.
- Advise and work in an open and collaborative manner when issues arise during the delivery
 of work.
- Responsible and accountable for looking after their own assets held within SAR property.
- Any documents or information submitted by outside party/permit requester to SAR will be considered as approved and validated from their side. Any misinformation or disinformation will be considered as a violation of SAR work permit requirements.

1.4. Disclaimer:

We have taken care to ensure that the content of this document is accurate, complete, and suitable for its stated purpose. We make no warranties, express or implied, that compliance with the contents of this document shall be enough to ensure safe systems of work or operation.

SAR will not be liable to pay any compensation in respect of the content or subsequent use of this document for any purpose other than its stated purpose or for any purpose other than that for which it was prepared except where SAR can be shown to have acted in bad faith or where there has been willful default.

1.5. Abbreviations

Abbreviation	Expanded / Full-Form
CGL	Comprehensive General Liability Insurance (CGL)
CAR	Construction All Risk Policy
EAR	Erection All Risk Insurance Policy
EIA	Environmental Impact Assessment
EPC	Environmental Permit for Construction
FFS	Fire Fighting Systems
HR	Human Resources
HSE	Health, Safety & Environment
IS	Industrial Security (IS)
LSS	Life Safety Systems
MOI	Mobile Operation Inspector
MS	Method Statement
WARA	Work Activity Risk Assessment
TTF02	Train Timing Form
WP	Work Permit
NCEC	National Centre for Environmental Compliance
NPM	Network Planning & Management
OCC	Operation Control Centre
OHTL	Overhead Transmission Line
HDD	Horizontal Directional Drilling
PTS	Personal Track Safety

1.5. Abbreviations

Abbreviation	Expanded / Full-Form
PTS	Personal Track Safety
РО	Protection Officer
PICOP	Person in Charge of Possession
PICOW	Person in Charge of Work
PR	Permit Receiver
PPE	Personal Protective Equipment
PTW	Permit To Work
ROW	Right of Way
SAR	Saudi Arabia Railways
S&T	Signaling & Telecom
IFC	Issued For Construction
ssow	Safe System of Work
TK	Track Kilometer
NSR	North South Railway
EWR	East West Railway

1.6. Definitions:

Term	Definition	
Outside Party	An individual, member of the public or organization (and their contractors) other than SAR, which promotes, funds, designs, constructs, owns and maintains the works for their own company requirements. NOTE 1: Outside Parties may include Local Authorities, Statutory Undertakers, Builders, and Private owners. NOTE 2: Examples of Outside Party Works may include: -ARAMCO undertaking culvert or pipe installation requiring new infrastructure to be builtA Utility company installing an OHTL over SAR track such as Saudi Electricity Company.	
Outside Party Permit	A form or document that provides approval to an Outside party	
Method Statement	A written document that explains the correct process / work methodology, safety precautions and work requirements of project to complete the task in safe manner considering all the risk which identify in the risk assessment.	
Work Activity Risk Assessment (WARA)	It is a careful examination of your workplace activities and environment to identify those things, situation, processes etc. that may cause harm particularly to people and evaluate those hazards and risks to put suitable control measures to minimize the risk at ALARP level.	
Permit To Work (PTW)	A written permission given to an outside individual/contractor/Outside party to carry out certain specific work within a specified timeframe on certain location.	
Operational Railway	The term operational railway includes the area called on the lineside and the area called on or near the line.	
On or near the Line	You are on or near the line if you are within 2 meters of the nearest rail or on the line itself.	

1.6. Definitions:

Term	Definition
Lineside	You are lineside if you are more than 2 meters of from the nearest rail and inside the railway boundary fence.
Safe System of Work	A safe system of work is a method of work to provide protection to individuals working on or near the line whilst ensuring the safety of train movements.
Personal Track Safety (PTS)	Certificated competence, normally required for staff to go on or near the line or on the lineside.
PO / PICOP / PICOW	A protection officer is responsible for ensuring a suitable safe system of work is in place to protect individuals, who are required to work on or near the line.
Disruptive Work Operations	Work that will have an operational effect on the SAR railway infrastructure and/or operations.
Non-Disruptive Work Operations	Work that whilst within the SAR boundary will have no effect on railway infrastructure and/or operations.
Possession	A line is under possession when arrangements have been completed to block the line to normal passage of trains.
Blockage of the Line	A blockage of the line is a temporary blockage of the line to train movements to allow access to the track for non-disruptive work. A blockage of the line can be cancelled to allow a train to pass and be retaken again.
Safe Work Area	A Safe Work Area is an area lineside or off track protected by fencing or barrier to prevent those working from approaching any line open to train movements.
Adjacent Line Protection	Adjacent Line Protection provided protection to individuals required to work or walk on the outside of a train by preventing train movements on adjacent lines.

2. SAR COMPETENCY REQUIREMENTS

The railway is a dangerous environment and therefore SAR considers safety as its highest propriety. All personnel working within the railway boundary fence must undergo PTS training.

SAR Personal Track Safety (PTS) procedure mandates that anyone working on SAR Infrastructure operational railways (inside the boundary fence or near the tracks) must hold a valid PTS certification card.

Protection Officers (POs) are necessary during work protected by possessions or line blockages. PO is required for NSR network work and PICOP/PICOW for EWR network work.

The outside party company, as part of their proposal, must provide evidence of competency associated with their work scope and nature of work to be performed.

Contractors must provide a list of personnel needing PTS, PO, and PICOP/PICOW competencies.

The outside party's workforce should understand basic English, pass the training course, and comply with the SAR Rule Book. For PICOP training, candidates must speak Arabic and pass the test.

The Permit department will assist the Outside Party company in acquiring the required competency.

To arrange PTS, PO, or PICOP/PICOW training, the outside party must submit the following documents:

- CR & VAT Certificate
- National Address certificate
- Acceptance of training cost borne by the outside party
- Candidate list with their ID copies for those undergoing training
- Company supervisor name, email, contact number and post box number.

3. INSURANCE REQUIREMENTS

The Outside Party collaborates with SAR Insurance Department to determine suitable coverage and policy based on the work category. The department may take into consideration the project value when factoring the insurance coverage in relation to SAR interface.

The type of insurance that could be considered are listed below. (not an exhaustive list)

- Comprehensive General Liability (CGL).
- CAR / EAR Insurance. This is Construction all risk / Erection all risk Insurance policy.
- Workers' Compensation / Employees Liability.
- Professional Indemnity Insurance.

SAR Insurance Department will advise appropriate policy to the Outside Party based on project scope, location, and risk exposure etc.

In General, the Outside Party contractors working on our premises should have CGL Insurance Policy coverage to work safely at SAR.



4. SAR WORK PERMIT REQUIREMENTS

To apply for a SAR work permit, the outside party should send an email to SAR permit department at permit@sar.com.sa with brief project descriptions and location details. The permit department will review the request and communicate the necessary permit requirements.

The outside party must submit all relevant documentation related to their project work. The minimum required documents for SAR's review and approval process are as follows:

Sl. No	Minimum Required Documents
1	Introduction Letter from client (Introducing contractor with project descriptions)
2	Method Statement (As per SAR template)
3	Work Activity Risk Assessment (As per SAR template)
4	SAR Work Permit Form (As per SAR template)
5	Project Full Insurance Coverage Policy
6	TTF02- Network Scheduling Program (As per SAR template)
7	Work Area Layout showing coordinates, landmarks, and SAR TK (Track Kilometer)
8	KMZ File / Google Earth Image of project location
9	Project drawing (AutoCAD, KMZ, PDF)
10	Project staff list with their valid ID copy

Based on specific projects, SAR may request additional documents to be submitted by requester/outside party.

Note: Permit request should be submitted by project owner/client.

4. SAR WORK PERMIT REQUIREMENTS

Work permit request should include the below requirements:

Health, Safety & Environment Requirements:

- Work Activity Risk Assessment form (WARA form)- It must include all project significant
 activities, identify potential hazards and risks with each task/activity step and provide
 suitable control measures to minimize the risk in ALARP region.
- HSE Plan Outside Party is required to prepare a comprehensive Project HSE Plan, which should include all HSE requirements/precautions, Emergency Response Plan (ERP) and others forms confirming to national and international standards.

Real Estate Requirements.

- Provide drawing in the format such as (AutoCAD, KMZ, PDF)
- Clarify the general location and path of the project, locating beginning and end of excavation in the railway precinct of (200 m) for each side.
- Inserting the approved coordinates according to the spatial reference (WGS84 UTM).
- Clarify the vertical dimensions between "the project" path and the railway axis.
- Insertion the SAR kilometer marks of the railway in the approved technical form, as this example SAR TK (350 KM + 050 M).



4. SAR WORK PERMIT REQUIREMENTS

Network Planning Requirements:

- TTF02 form shall be filled exactly & carefully (Work location, Type of Possession, Time, Date, PO, PICOP/PICOW details, use of heavy equipment or not, distance from line & fence, crane distance from the line if use, crane boom length, details of the work, if there is any impact shall be filled S&T impact form & other additional information as require).
- Work Impacts in Passenger service and Freight train operation or other train operation (If required to stop or cancel the train etc.).
- If a Work Train is required shall be specified movement & type of equipment.
- Approved detailed layout plan shall consider (Track, KM, distance, vertical clearance, horizontal clearance, dimensions & equipment location).
- Protection plan method for work area
- Location and distance of safety barrier to track.
- PICOP / PICOW shouldn't have two activities at same time for EWR network.

Industrial Safety Requirements:

Project staff list with their nationality details

- Valid ID copy
- If you need to visit the site- Please submit SAR visitor form to the relevant Area Security In charge for approval.
- If you need access to the inside railway boundary fence, please contact relevant SAR network
 Security Control Centre.

Engineering /Technical Requirements must be submitted based on different types of projects work, which are mentioned below for reference.

5.1 Bridge Construction:

- Approved detailed layout plan and cross section drawings (IFC) with company stamped.
- Approved design drawing shall be considered the SAR future track.
- Design calculations report for the provided drawing + Native files for the design.
- The bridge design specifications shall be according to MOT/ MOMRA.
- Vertical clearance (top of rail to bottom of bridge structure) and horizontal clearance (Centre
 of the track to the edge of bridge abutment/ column, considering the future track) shall be
 in accordance with the approved design drawings/AREMA.
- Any structures over SAR track shall consider the clearance for fixed obstructions to SAR track (vertical clearance)
- Soil investigation /Geotechnical report
- Underground utilities report
- Crane lifting plan with calculation and consider boom length with horizontal & vertical clearance from track edge.
- Inspection certificates for equipment and operator



5.2 Culvert & Bridge Construction under the Railways

- Approved detailed layout plan and cross section drawings (IFC) with company stamped.
- Approved design drawing shall be considered the SAR future track.
- Design calculations report for the provided drawing+ Native files for the design.
- Soil investigation /Geotechnical report
- Underground utilities report / Electrical devices grounded.
- Crane lifting plan with calculation.
- Outside party inspection certificates for equipment and operator
- Full design with site specific solutions for the transition areas and Track Stiffness calculations, both sides of the Culvert or Bridge, (track stiffness shall not be altered after the works completion).
- Special attention shall be given to the sub-ballast layer. [Sub-Ballast layer shall be reinstated
 with the same material and not concrete (In exceptional cases the contractor can propose
 solutions, subject to SAR approval, that will maintain the Track stiffness to the same
 functional levels)].
- In the case of open cut the Railway Track Pannels to be removed shall be fully removed (rails, sleepers, ballast, signaling items etc.) and restored according to SAR standards, specifications, and regulations and implementing all the required transition zones within the embankments (to uniformly transition from stiffer to less stiff embankments) by the means of a SAR approved contractor.

5.3 Bridge Construction over the SAR Railways

- Approved detailed layout plan and cross section drawings (IFC) with company stamped.
- Approved design drawing shall be considered the SAR future track.
- Design calculations report for the provided drawing+ Native files for the design.
- The bridge design specifications shall be according to MOT/ MOMRA.
- Vertical clearance (top of rail to bottom of bridge structure) and horizontal clearance (center
 of the track to the edge of bridge abutment/ column, considering the future track) shall be
 in accordance with the approved design drawings/AREMA.
- Any structures over SAR track shall consider the clearance for fixed obstructions to SAR track (vertical clearance)
- Soil investigation /Geotechnical report
- Underground utilities report
- Crane lifting plan with calculation.
- Inspection certificates for equipment and operator



5.4 HDD Method/Micro Tunnelling Method Crossing under SAR Railways

- Thrust Boring is not allowed under SAR track. Only HDD/ Micro Tunneling is allowed.
- KMZ file/Google Earth map with plotted the SAR KM station & coordinates of pipe/cable to cross SAR track and plotted coordinates for entry pit and exit pit.
- Approved detailed layout plan and cross section drawings (IFC) with company stamped including the below:
- SAR KM and coordinates of pipe/cable to cross SAR track
- Coordinates of entry pit and exit pit
- Cross section and dimensions of entry pit and exit pit.
- Showing pit outside the SAR fence
- Elevation of top of rail, top of sub ballast and top of HDD borehole (crown)
- Vertical clearance from top of horizontal bore hole (crown) to top of Sub-Ballast shall be minimum of 5 m.
- SAR track center line & fence distance to pits
- Location and distance of safety barrier to track and pits and other fixed construction.
- Soil investigation/ Geotechnical report
- Underground utilities report
- Crane lifting plan with calculation.
- Pipe carrier and pipe casing details and material testing certificates (MTC)
- Pipe casing (bigger diameter) calculation showing pipe casing is safe and can withstand the train movement Dynamic load of 700KN.
- Pipe casing (bigger diameter) axle load calculation according to AREMA.
- Inspection certificates for equipment and operator of Crane mobile and HDD machine
- Work Impacts on Passenger service and Freight train operation or other train operation (If required to stop or cancel train etc.)
- Protection Plan for work area
- Location and distance of safety barrier to track.

To be added in Method Statement:

- In Section 11-Method & Sequence, please add: "A survey of the railway tracks prior to commencement of the HDD works, monitoring during and survey of the railway tracks upon completion of the works shall be conducted by the contractor according to SAR Railway Track Monitoring Regime".
- In Section 11-Method & Sequence, please add: "HDD/ Micro Tunneling operations can only
 proceed under a <u>track possession</u> status during operating within the Moving Train Load
 Affected Zone."
- In Section 11-Method & Sequence, please provide mitigation measures in case there is leakage, repair, inspection, etc. under SAR railway tracks and SAR ROW.
- In Section 11-Method & Sequence, please add: "Contractor shall return the excavated location to its original form. Compaction shall be in accordance with SAR standards and specifications".
- In Section 11-Method & Sequence, please describe how the abandoned horizontal borehole will be treated to secure the above Railway line(s) and the train load effected zone.
- In Section 11-Method & Sequence, please mention the testing activity of carrier pipe that will be performed after installation while detailing the procedure of testing.
- In Section 11-Method & Sequence, please mention what mechanism is out in place to achieve the Leakage monitoring of pipes passing under the track.
- In MS please describe scope of works and highlight project work which interface with SAR infrastructure, please mention the Line number, SAR KM station and coordinates of the pipe/cable to cross SAR track in location section.



To be mentioned in WARA form:

- Please mention the risk of the horizontal bore hole collapse during the operation.
- Please mention the risk of needing to abandon the horizontal bore hole due to any potential issue.
- Please mention the risks related to SAR Railway Tracks disturbance, movement, SAR
 Property damage (including moving trains), life losses or injury, SAR Operations disturbance and/or interruption and remedial measures to be implement.
- Please mention the risks and mitigation measures in case there is leakage, repair, inspection, etc. under SAR railway tracks and SAR ROW.

To be clearly mentioned in TTF02 Form:

- The possession location shall be referred to as in SAR TK and it shall include the area necessary to perform the track survey prior and post operation as well as the Track monitoring (including the area from the selected gate to the work area).
- Please fill in the required cells with the Track Possession information. The contractor needs Track possession for the Railway Track Monitoring as well as for the HDD under the Loaded Train effected zone.
- TTF02 Form shall be filled exactly & carefully (Work location, Type of Possession, Time, Date, PO, PICOP/PICOW details, Use of heavy equipment or not, distance from line, crane distance if there is one, crane boom length, details of the work & other additional information's).

5.5 Any Crossing under SAR Railways (Open Cut or HDD/ Micro Tunnelling)
To be Implemented during Design Phase:

- For HDD Method/ Micro Tunneling Method, vertical clearance from top of horizontal bore hole to top of sub-ballast shall be minimum of 5 meters.
- For HDD Method/ Micro Tunneling Method, entry pit/exit pit shall be outside SAR fence.
- The casing shall be designed to withstand all loads above including the moving trains loading (AREMA Cooper E80). The train load shall be calculated of 37000Kg per Axel.
- The new or renewed under Track crossings for pipelines should be of such a design to install
 the currier pipe in a casing. So, to make sure that in future time, if there is a need for the pipe
 replacement there will not be any need to interfere with SAR ROW in any depth.
- The casing arrangement shall be of a design, shape, form, and material to accommodate all
 the needs for inspection, maintenance, repair, or replacement whenever deemed necessary,
 without the need of disturbing SAR railway above or the formation below SAR ROW (Right of
 Way).
- The casing arrangement shall be of a design to provide the material (curried in the pipe) leakage or overflow a route to a pit out of SAR ROW either in a pit or to free flow, whichever is applicable.
- If there is a need of a pit, the pit shall be equipped with an alarm system to notify the user and in any case SAR of any leakage under SAR ROW.
- If the casing arrangement is going to direct the leakage product to free flow, the casing shall
 be constructed throughout SAR ROW, and all interrupted SAR facilities such as but not
 limited to, service roads, fencing etc. shall be reinstated to SAR needs and specifications. AT
 the mouth of the casing a riprap arrangement shall be formed.
- For pipe leakage detection under track, 1 of the below 2 options shall be considered.
- Fully automotive pipeline leakage detection/monitoring system that shall identify pipeline leakage and send the signal to the main control unit which shall automatically shut down the flow of liquid/gas. - This will be challenging at remote locations as the system requires a power supply to instruments.
- Local mechanical leakage detection system that includes a gauge which monitors important
 parameters like pressure and flow at the START and END of the pipeline passing under the
 track along with shutoff valve This will require personnel to physically monitor the gauge.

5.6 OHTL Crossing in SAR Railways

- Approved detailed layout plan and cross section drawings (IFC) with company stamped.
- Vertical clearance (top of rail to lowest conductor) & horizontal clearance (from center of the track to the tower line) for any voltage shall be in accordance with SEC specification "Clearances and Right of Way Requirements".
- Provision of nylon net protection with scaffold above track during stringing work
- Details of nylon net
- Calculation of scaffold for nylon net (Contractor shall design the scaffold in such a manner that in the case of overturning/ collapse, it will not affect SAR Railway Tracks and SAR operations, personnel, passengers, trains).
- Soil test report under erected scaffold for nylon net
- Crane lifting plan with calculation consider boom length with horizontal & vertical clearance to track edge.

5.7 Heavy Vehicle Crossing in SAR Railways

- Approved detailed layout plan and cross section drawings with company stamped (In the
 cross section there shall be a detail illustrating the clearance from Top of Rail to Bottom of
 Bridging Structure while the bridging structure is under full load status).
- Detailed bridging arrangement drawings (Protection for Rail).
- Bridging load calculation (with Native files for the Load calculations) so that it can withstand the full load during crossing.
- Number of crossings over the railway
- Complete details of the heavy vehicle and equipment loaded.
- Approved detailed layout plan and cross section drawings (In the cross section there shall be
 a detail illustrating the clearance from Top of Rail to Bottom of Bridging Structure while the
 bridging structure is under full load status).
- Work Impacts in Passenger service and Freight train operation or other train operation.
- Equipment list with Inspection certificates for equipment and operator.

To be added in Method Statement:

In Section 8 Preparation, please add: "Before starting to cross the crossing, a walk-around and visual inspection will be made of the equipment in its current setup to check that

- nothing has changed when crossing the workplace according to the approved Method Statement".
- In Section 11 Method & Sequence, please add: "All the works will be done under SAR's supervision (Track Master)".
- In Section 15 Inspections/checks/tests, please add: "The SAR's (Track Master) will check all SAR's assets during and after the trailer passage according to the instructions".

5.8 Construction near SAR Railways

- Approved detailed layout plan and cross section drawings (IFC) with company stamped (illustrating all SAR and Railway related structures, elements, and facilities)
- Soil investigation/ Geotechnical report, if needed
- Detailed lifting plan with calculation

5.9 Tenants Installation in SAR facilities

- Approved detailed layout plan and cross section drawings (IFC) with company stamped (illustrating all SAR existing structures, elements, and facilities)
- Submit electrical load requirement details with complete calculation
- Provide the electrical power supply connection source
- Provide number of panel board and circuit breaker
- Provide and confirm the availability of spare load capacity in the SAR existing panel and spare circuit breaker to feed new load
- Provide the water supply and drainage connection source
- To be verified and confirmed by SAR Facility Management dept.
- To provide as built drawings
- Change Management Form or Request for Change Form (RFC) to be filled and signed, if needed



5.10 Works Interfacing with SAR Assets/ Facilities

- · Approved detailed layout plan and cross section drawings (IFC) with company stamped.
- Provide what process or how the connectivity into SAR assets/facilities.
- Provide the electrical/telecom power supply or water supply connection source.
- To provide as built drawings
- Change Management Form or Request for Change Form (RFC) to be filled and signed, if needed

6. SAR RIGHT OF WAY (ROW)

The schematic below provides a high-level indication of when a permit is required from SAR. SAR operates a limit of encroachment policy that requires Outside Party to inform if any works outside the railway boundary fence line within 5 meters that will consider close enough to SAR boundary and require SAR Permit to Work.

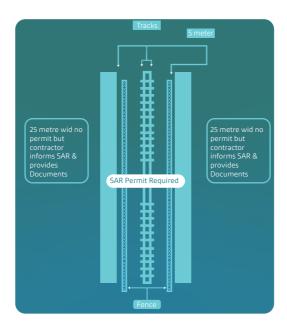
In addition, if any Outside Party working outside fence after the 5-meter limit, however their work involves crossing either underground or overhead track must have in their possession valid SAR permit to work.

Any work carried out by Outside Party away from 5 meter or more beyond the SAR railway boundary fence outside but within 30 meters (25m+5m segments see above Fig.-1Boundary Limits for Permit to Work) from the fence line but do not affect/impact SAR, then a SAR permit to work is NOT required.

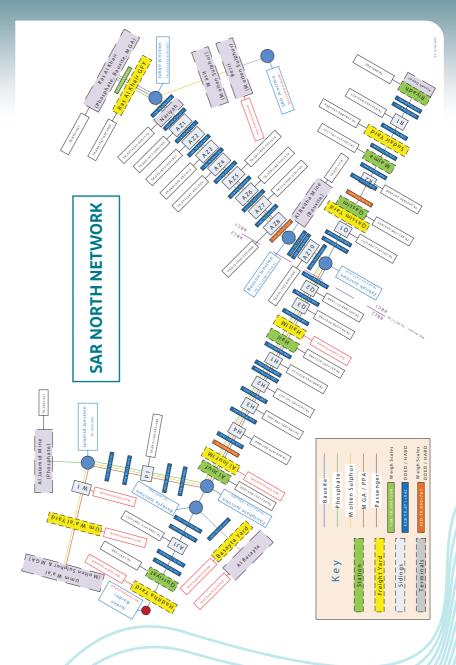
However, it is the responsibility of Outside Party, who will work within these limits, to provide the relevant information, documents and inform SAR about the nature of the works being undertaken and impacts prior to start of the activity.

SAR has the right to review or suspend such works until satisfactory acceptance of any works within these limits and will not affect SAR's operational asset integrity from any aspect.

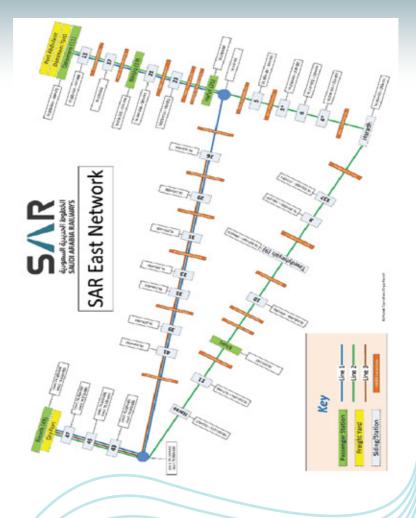
If any outside party company is uncertain about SAR work permit requirements, then please contact SAR Asset Protection & Work Permit Dept. at permit@sar.com.sa for guidance.



7.SAR NETWORK INFORMATION



7.SAR NETWORK INFORMATION



8. PERMIT VALIDITY AND EXTENSION

Permit is valid only as mentioned the time, date, and location in approved SAR work permit form and TTF02.

However, if permit extension request submitted on time along with valid insurance policy, then it will be process for approval and will be extended after getting necessary approval from concerned departments and notify to requester, however if rejected due to any reason then they cannot work on SAR infrastructure and issued permit need to close ASAP after expiry.

Note:

SAR reserves the right to suspend or revoke any issued work permit without any notice as required by circumstances or operational requirements.



9. SAR WORK PERMIT CONDITIONS

1.Outside Party / Permit requester is responsible to avail all related/applicable stakeholder's approvals/clearances such as SEC, STC, Municipality, Water commission, Sewage & Storm water network commission, Maaden, MODON, MOMRA, MODA, SABIC, ARAMCO, any involved statutory bodies & government agencies (for their utilities & services). SAR is not liable for any claims and dispute arising there on. All stakeholders advised shall be the responsibility of permit requester.

- **2.**Any documents/information submitted by permit requester/contractor to SAR will be considered as **approved and validated** from their side.
- **3.**Permit Requester/Contractor must contact respective OCC number prior to start of any activities on SAR railway operational line on daily basis.
- **4.**Any **incident/accident must be reported immediately to OCC** and follow the instructions as advice.
- **5.**All necessary safety measures shall be taken by requester to prevent any incident/accident on work site and protect SAR Assets and Environment.
- 6.Report any security incident / threat immediately to Security Control Centre (SCC).
- **7.**For any issue related to work permit, please contact Permit Coordinator at (permit@sar.com.sa).
- **8.**This SAR work permit does not allow any work to take place on SAR Railway Operational Line without a valid authorization from SAR OCC and approved TTF02.
- **9.** All staff must have a valid ID in their possession while working on SAR premises/infrastructure.
- **10.**Only a competent and medically fit workforce shall be engaged in a project to carry out work in a safe manner.
- **11.**Any deviation/modification in the approved work methodology during execution will suspend the issued work permit automatically.
- **12.**All workers on SAR site must wear **mandatory PPE (Orange Hi-Visibility Vest and Safety Shoe)** and use additional PPE as per their task and comply with local site safety requirements.
- **13.** Any significant hazard or risk identified during the work must be mitigated and informed to SAR concerned dept. for their feedback.
- 14.Permit requesters are allowed to work only on specific work locations and time which have been approved in SAR work permit and TTF02 form, apart from that if they are working in any other locations will be considered as a violation.

9. SAR WORK PERMIT CONDITIONS

15.Any violation to SAR work permit requirements and conditions will lead to automatic suspension of issued work permits.

16. Any change in the execution plan or scope of work requires prior approval from their client and SAR side, which might be affected by this change.

17.Requester/Contractor must comply with submitted documents like- Technical requirements, standards, drawing, specification, method statement and work activity risk assessment etc. to ensure work is carried out in a safe manner.

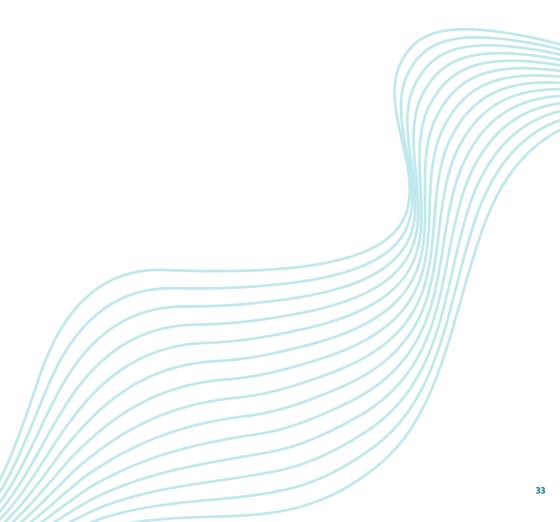
- **18.**Toolbox Talk, Safety checks of equipment and worksite inspection must be done by their qualified individual every day prior to start of work and keep a record.
- **19.**All work activity under SAR permit to work must be supervised by their client and requester to ensure work is carried out in safe manner and in compliance with SAR permit requirements.
- **20.** Project Insurance policy (CGL, CAR/EAR) must cover their project work for which they have requested SAR work permit and shall be valid till work permit expiry date.
- **21.**GSMR handset shall only be used by SAR trained and authorized person such as PO, PICOP/ PICOW for communication purpose only with OCC. Any misuse of the GSMR device is strictly prohibited.
- **22.**GSMR device shall be used only for assigned work permits and return in safe condition. Any damage to the device will be chargeable and the cost will be recovered from the requester.
- **23.** Any **work permit extension** should be requested through the permit email at least before 5 days of expiry and insurance must be valid for the requested extension work period.
- **24.**Any issued work permit must be closed by the permit requester within 5 days of expiry through email and submit all the required documents for a closure of work permit.
- **25.**Ensure approved work permit and relevant documents copy always available at the job site for inspection during the work which is underway, and any requirements/condition stated on the permit always adhered.
- **26.**Outside Party/ Requester must comply with SAR Work Permit Procedures and follow the requirements. Any deviation to requirements requires prior approval from the SAR concerned dept.

9. SAR WORK PERMIT CONDITIONS

27. Any misinformation or disinformation will be considered as a violation of SAR work permit requirements.

28.Please do not cut any fence or make any illegal level crossing on SAR network unless it is approved by SAR.

29.Kindly utilize the nearest authorized gate for entry into the site or inside railway boundary fence.



10. PERMIT CLOSURE / HANDOVER

Request for permit closure/handover when work is completed.

- a) Inform SAR about the project work that is completed.
- b) Conduct site inspection for restoration and cleanliness.
- c) If required, a joint site walkthrough by SAR representative and outside party
- d) Submit minimum required documents for work permit closure, such as As Built drawings and Assurance letter.
- e) SAR may request any additional documents as required for closure of work permit.
- f) Project related records/documents should be submitted in soft copies in PDF and native file formats as required.

Assurance Letter to SAR

A formal client letter shall be provided to SAR stating that any works completed by the outside party contractors/sub-contractors on their behalf will be guaranteed and cover the cost if any liability arise due to the sub-standard work on SAR infrastructure and will be in place for a minimum of five years after handover in general. However, SAR may request to increase the length of guaranteed time required based on the type of works being undertaken within its infrastructure boundary.

An assurance letter shall be attached by the outside party client whilst closing the work permit as a mandatory requirement.

S/\R

Contact us:

Asset Protection & Work Permit Dept. Saudi Arabia Railways (SAR) P.O Box 64447, Riyadh 11536 Email: permit@sar.com.sa







S/\R