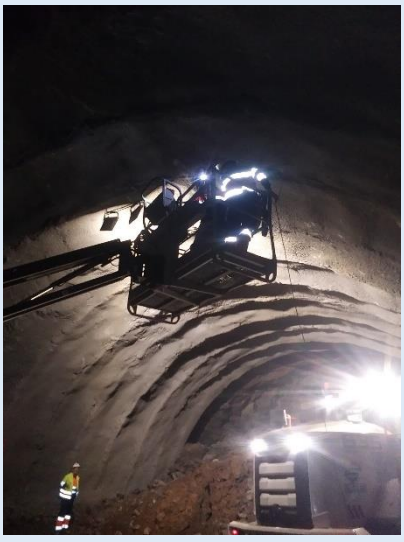
Construcción

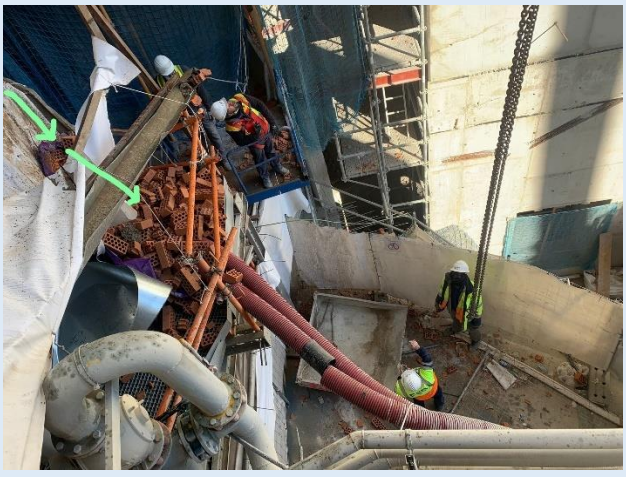
LESSONS
LEARNED
2022

CONTENTS

Lesson learned documentation sheet	
LESSON NO.1: Dropped tools while using Mobile Elevating Work Platforms (MEWP)	
Author/s:	FCC Construcción Southern Zone
Project	Closure of the Tenerife Island Ring
Event description	Tools dropped from a Mobile Elevating Work Platform (MEWP)
Causes	Inappropriate tool use. Placing hand tools in inappropriate spots. Lack of tool fastening to prevent them from falling
Lessons learned	Signposting and marking off of the working radius for MEWP works Order and proper use of tools on MEWP. Use of tool holders.
Photographs	

Lesson learned documentation sheet	
LESSON NO.2: Dropped counterweights from self-propelled crane	
Author/s:	FCC Construcción Northern Zone
Project	JV GALINDO BEURKO
Event description	Failure of bolts securing counterweights on self-propelled crane.
Causes	Mechanical failure. Poor condition of the bolt securing the counterweights.
Lessons learned	Perimeter marking to prevent people from passing through. Initial crane safety element check.
Photographs	

Lesson learned documentation sheet	
LESSON NO.3: Collision between moving vehicles	
Author/s:	FCC Construcción Eastern Zone
Project	Yecla motorway
Event description	Slight collision between tanker and reversing dumper lorry.
Causes	Recklessness of the lorry driver in stopping without observing the distance to the dumper. Recklessness on the part of the dumper driver for failing to give advance indication of the operation or checking for vehicles next to him.
Lessons learned	Importance of observing safety distances. Provision of rear-view cameras on this type of machinery.
Photographs	

Lesson learned documentation sheet	
LESSON NO.4: Inappropriate pallet transport	
Author/s:	FCC Construcción Central Zone
Project	Santiago Bernabeu Stadium Refurbishment
Event description	Dropped material caused by pallet breakage during crane lifting manoeuvre.
Causes	Failure to handle loads with the appropriate devices, using slings when they should be transported with pallet forks.
Lessons learned	Use the appropriate tools for moving loads.
Photographs	

Lesson learned documentation sheet	
LESSON NO.5: Dropped material during manual loading	
Author/s:	Convensa-Transport
Project	NIJAR – ANDARAX RIVER
Event description	Dropped load while being handled by workers.
Causes	The load was too heavy for the number of workers engaged in the operation.
Lessons learned	The maximum weight to be handled by workers must be taken into account. Teams of workers shall be adequately sized in number.
Photographs	

Lesson learned documentation sheet	
LESSON NO.6: Machinery malfunction	
Author/s:	Machinery
Project	Equipment Depot
Event description	Abrupt and unexpected stops of a saw in the workshop.
Causes	FAT Bandsaw malfunction.
Lessons learned	Remove the machine and purchase another one if necessary. An external company was commissioned to conduct an additional overhaul of all machines in the workshop.
Photographs	 

Lesson learned documentation sheet	
LESSON NO.7: Overturned lift basket caused by an outrigger collapse	
Author/s:	FCC Industrial
Project	Adaptation to birdlife in a support
Event description	Overturned lift basket caused by collapsed and slipped outriggers.
Causes	Failure to check the condition of the ground on which the outriggers were set up. Not having elements to extend the support surface of the stabilisers if necessary.
Lessons learned	Preliminary analysis before carrying out work with baskets Extend the base area of outriggers whenever the ground conditions raise doubts about the load-bearing capacity.
Photographs	

Lesson learned documentation sheet	
LESSON NO.8: Non-compliance with the Heavy Lifting Plan	
Author/s:	FCC Construcción Chile
Project	**Industrial Bridge**
Event description	The self-propelled crane was unable to lift and move pile reinforcement.
Causes	The crane was positioned differently from how it was intended in the Lifting Plan.
Lessons learned	Prior analysis of crane positioning. Marking of the positioning spot.
Photographs	

Lesson learned documentation sheet	
LESSON NO.9: Overconfidence	
Author/s:	FCC Construcción Colombia
Project	Guillermo Gaviria Echeverri Tunnel
Event description	Worker walking on an unstable surface with risk of falling on rebar.
Causes	Lack of risk perception and overconfidence in the passage area. Failure to protect protruding beam rods, lack of supervision.
Lessons learned	Awareness-raising talks on existing risks. Increased field supervision.
Photographs	 

Lesson learned documentation sheet	
LESSON NO.10: Incident with underground power line	
Author/s:	FCC Construcción Netherlands
Project	A9 Motorway Construction
Event description	Damage to a cable while laying the foundations for the perimeter fence.
Causes	Overconfidence. Lack of review by potentially affected services.
Lessons learned	If the project being implemented is modified or extended, the necessary tests and tests to prevent damage to existing services must be carried out.
Photographs	

Lesson learned documentation sheet	
LESSON NO.11: Riesgo de sepultamiento	
Author/s:	FCC Construcción Mexico
Project	Maya Train Section II
Event description	While dumping material, some of it accidentally fell on a worker.
Causes	Standing in or passing through dangerous areas. Carelessness or inattention, overconfidence. Lack of or inadequate planning.
Lessons learned	After analysis of the dumping, backfilling and compaction works. Development of work procedures to minimise risks to workers.
Photographs	

Lesson learned documentation sheet	
LESSON NO.12: Fallen machinery	
Author/s:	FCC Construcción Peru
Project	Lima Metro: Line 2
Event description	Fall of lifting platform during transfer by crane to a lower level.
Causes	Platform anchorage point fatigue failure. The anchorage points differed from the ones indicated in the equipment manual.
Lessons learned	Review of crane lifting equipment manuals and awareness raising for all personnel involved in equipment lifting manoeuvres. An update of the load lifting procedure to include lifting of articulated platforms.
Photographs	 

Lesson learned documentation sheet	
LESSON NO.13: Improperly stacked excavation material	
Author/s:	FCC Construcción Romania
Project	FCC-AST-CON, TR.3, FUS
Event description	Personnel working in a 1.5 – 3.0 metre deep excavation with the presence of material from the excavation next to the edge, with a risk of falling material.
Causes	Material from the excavation stacked next to the edge.
Lessons learned	Material from excavation must be piled at least 1 metre from the edge. Avoid overloading the slope edge.
Photographs	

Lesson learned documentation sheet	
LESSON NO.14: Lack of space to organise documents	
Author/s:	FCC Construcción USA
Project	Miami Office
Event description	Office material fell when a worker was looking for documentation in the storage area.
Causes	Reduced storage space. Lack of order.
Lessons learned	Have a storage area of sufficient size for the correct placement of office material.
Photographs	

Lesson learned documentation sheet	
LESSON NO.15: Near-accident when handling a toolbox	
Author/s:	FCC Construcción Nicaragua
Project	Equipment Depot
Event description	Sudden and abrupt closing of the toolbox lid when the worker was storing the keys.
Causes	The lid was not completely open when a gust of wind occurred. The toolbox lacks a device to prevent the lid from closing abruptly.
Lessons learned	Awareness of the risks present in the workshop area of the equipment depot. Check and ensure that the lid must be fully open.
Photographs