

# HS2 CHILTERN TUNNELS



<b>Client</b>	HS2	<b>Access Value</b>	£130k
<b>Location</b>	Maple Cross	<b>Construction Value</b>	Undisclosed
<b>Main Contractor</b>	ALIGN JV	<b>Equipment</b>	Layher
<b>Sector</b>	Infrastructure		
<b>Products</b>	Layher   Monarflex   Temporary Roof		

*After a vigorous tender process PHD were chosen by the ALIGN JV to provide access and protection scaffolding to the new Tunnel Boring Machines (TBM's) at the Chiltern Tunnel section of the HS2 project.*

## WHAT WE SUPPLIED

Bespoke scaffolding was designed by PHD's in-house design team in collaboration with the ALIGN JV temporary works managers to provide access for the engineers and welders to the huge tunnel boring machines so that they could be assembled ready to bore a 16km tunnel into the Chiltern hills. The scaffolding needed to provide protection from the elements and due to the fire risk of the hot works, all scaffolding had fire-retardant metal boards and fire-retardant monarflex for the external facade.

Layher Scaffolding is made of aluminum, which is naturally fire resistant. Layher scaffolding decks are gap-free, 100% wood-free and have precision-fit toe boards eradicate trip-hazards and drop through, increasing worker and job site safety.

Apart from its light weight, which eases handling and erection operations and its need for only minimal cross-bracing, we could create the optimum layout for workforce access and movement during welding work.

**Innovation:** As there were identified fire-risks to the project, PHD had to ensure we did not use any flammable materials in the construction of the scaffolding platforms. PHD used in-house fabricated metal gap plates to provide a non-trip flush fit.





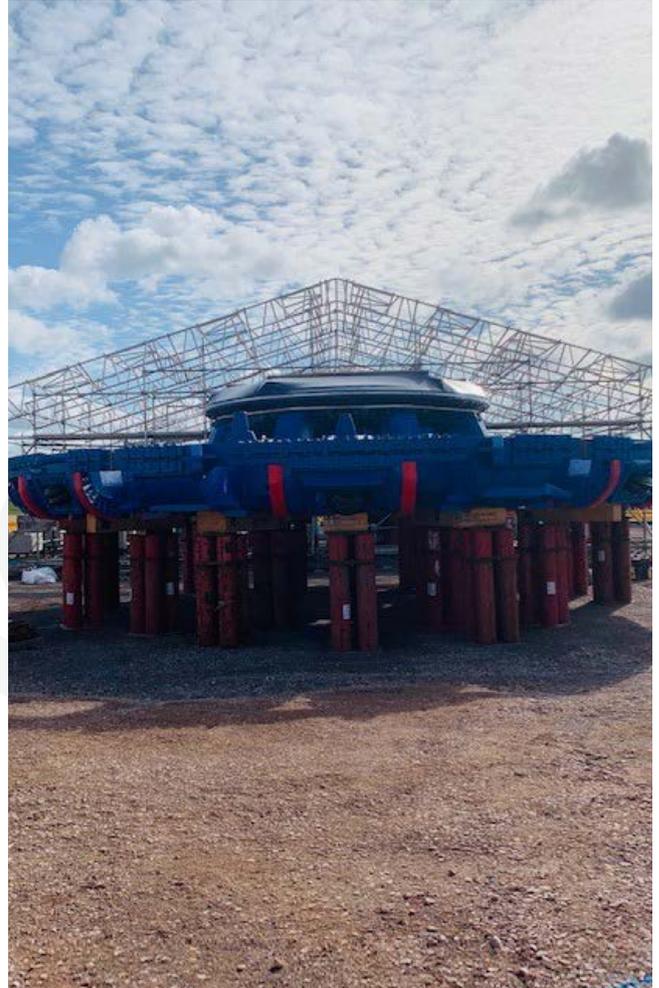
## GOING ABOVE & BEYOND

**High Security-** The site had very high levels of security and all operatives had to complete site specific inductions as well as biometric registering. PHD ensured we had a core team already pre-inducted so that we could get on to site quickly when needed.

**Logistics:** There were strict measures in place for delivery and collection of materials. This was all handled by our in-house logistics manager who made sure that every vehicle was pre-registered with the ALIGN site teams prior to any material delivery.

**Bio-Diversity Awareness:** The site was very local to PHD and so we were already very aware of the environmental challenges from the public. PHD wanted to ensure that our team were fully aware of the biodiversity around the site and used the Supply Chain Sustainability School video "Biodiversity On Site" to show the site team before work commenced ensuring that they would know what to do if they came into contact with any wildlife.

**Environment:** For our work at HS2 with the ALIGN JV we acquired a new Crew Cab vehicle with ultra low emission to transport our operatives and smaller equipment to the site. This helped ALIGN to meet HS2's environmental goals.



SEE MORE PHD PROJECTS AT [WWW.PHDACCESS.COM/PROJECTS](http://WWW.PHDACCESS.COM/PROJECTS)

Aspiring to **Greater** Heights | 01895 822 292 | [info@phdaccess.com](mailto:info@phdaccess.com)