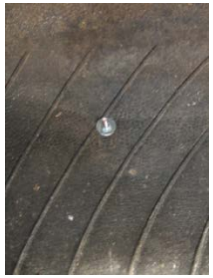
Play Statement

Project Name	Tyre tunnel and seat feature	
Brief description	A tunnel made of six tractor tyres positioned close to the Tree Management Centre off Circular Drive. Single tyre laid on side	 
Resources and installation	• Tractor tyres – sourced by tree team • Tree works – tree team • Design – by Ben Oliver in discussion with Westonbirt Management team – construction advice from Brian Kedward • Ground works to fit tyres – Stevenson and Sons (SAS) – advice on selection of competent contractor sought from Brian Kedward. Use of groundworks contractor on FC framework.	
Expected play benefits;- (A benefit is something that promotes or enhances the well-being of members of the public or society as a whole)	1. Pleasure and fun 2. The physical challenge encourages children to build their fitness. 3. Experience the thrill of climbing and crawling through tunnel 4. Young children can experience height within safe limits that will allow parental support 5. Development of self-confidence and well-being 6. The look and feel supports the key learning messages of Tree Management Centre interpretation and will encourage families to engage with our work 7. Helps with development of balance, spatial awareness and coordination. 8. Learning through experience: accidents from which one might learn 9. Potential for incorporation into imaginative games 10. In play provision, a degree of risk is often beneficial, if not essential. Children and young people enjoy challenging, adventurous play opportunities where they can test themselves and extend their abilities.	
Location	Circular Drive shelter belt	
Design considerations for play feature	**Issue**	**Construction mitigation**
	Selection of suitable tractor tyres – in particular need to ensure that rims are intact/not damaged so that wire is visible	• Tree team to select based on their experience working with tractor tyres having been briefed by Ben Oliver. • Tractor tyres are robust – as evidenced by use in arboretum to fell large trees on • Visual and hand inspection of each tyre rim for damage • Monitoring regime to check degradation of rubber over time
	Toppling of end tyres outwards – falling on users	• Dig the tyres in 300mm and fill / surround with shingle for ballast • Bolt tyres together – top and both sides (in middle) • Consider need for putting in fence posts at either end to peg end tyres in place • Monitoring regime to check bolts remain secure NB bolts / fence posts both add an additional risk to the feature in that users could bump into these elements. They will need to be installed with this in mind e.g. ensuring bolt positions don't stick out beyond rubber rim and have no sharp edges / fence posts are not within fall zone and are closely associated with the tyres
	Fingers caught between tyres due to movement of individual tyres	• Selection of large tyres that are less likely to move • Ballast to hold tyres firm • Bolt tyres together – top and both sides (in middle) to prevent tyres from moving to reduce the likelihood of limb / finger traps

Play Statement

	Tyres cave in under the weight of people climbing on top of them onto people inside the tunnel	• Ensure tyres butt up closely to one another and bolt adjoining tyres together so that • Monitoring regime to check degradation of rubber over time
	Hygiene – we don't know where tractor tyres have come from	• Careful initial selection of tyres from recycling centre • Clear tyres with detergent before opening to users
	Falling from height from roof of tunnel	• Measure fall height during installation – maximum fall height 1.2m (measured 14/7/15) • Use of woodchip surfacing • Ensure location has no hard objects in fall zone
	Over storey trees	• Dead wooding by tree team • Ongoing inspection by tree team
Installation process	1. Discuss and agree feature with FC team and Brian Kedward 2. Pre-commencement meeting with Ian Stevenson to agree location, discuss H&S, site rules 3. Fence off area from visitors during works 4. PPE 5. Monitoring during works (expected 1-2 days) 6. Sign-off prior to opening	
Sign-off / monitoring	• Play feature to be signed off by Brian Kedward before opening – visited 23/07/15. Neil Gresswell visited 29/07/15 • Added to regular inspections by Visitor Services team • Annual inspection by registered play inspector	
Expected lifespan / removal method	Lifespan: 3-5 years dependent on rubber degradation. Removal by groundworks contractor or tree team. Area to be fenced off during works. Ground to be made good after removal. Tyres to be recycled / disposed in accordance with legislation.	

Play Statement

Key risks		Who is at risk?	Level of risk	Control measures	Monitoring and maintenance
Falling from height off top of tyre tunnel The maximum height is 1.2m		Visitors including children	L	– Weekly written checks of play by Visitor services. – Yearly RoSPA inspections – Check earth is stone free 150mm in line with FC guidance for fall heights between 1 – 1.5m – Wood chip surfacing maintained to 300mm in line with FC guidance and EN1177. – Height allows for parents to supervise and support young children. Location ensures parents can walk either side of the tunnel – Tyre sides make it difficult for young children to climb on unaided – Emergency procedures in place	Weekly written checks of all play by Visitor Services. Yearly RoSPA inspections Westonbirt staff to monitor type of use Accidents monitored by site manager.
Movement of tyres - Toppling - Deforming to constrict tunnel	  	Visitors including children	M	– Initial design and installation to reduce movement – digging in tyres – use of shingle ballast – bolting tyres together – Tunnel diameter to ensure suitable head clearance – Weekly written checks of play by Visitor services	Weekly written checks of all play by Visitor Services. Yearly RoSPA inspections Westonbirt staff to monitor type of use Accidents monitored by site manager.

Play Statement

Finger / limb traps between tyres exacerbated by excessive tyre movement	 	Visitors including children	M	– Choice of tyres to ensure adequate crawl space – Initial design and installation to reduce movement – digging in tyres – use of shingle ballast – bolting tyres together – Weekly written checks of play by Visitor services – Removal when rubber wears	Weekly written checks of all play by Visitor Services. Yearly RoSPA inspections Westonbirt staff to monitor type of use Accidents monitored by site manager.
Slips, trips or falls		Visitors including children	L	– Siting of feature to ensure no hard features in fall zone – Use of woodchip surfacing – monitor depth and top up as required – Clear hard objects from fall zone during monitoring	Weekly written checks of all play by Visitor Services. Yearly RoSPA inspections Accidents monitored by site manager.
Injury from fallen tree		Visitors including children	L	– As per Westonbirt tree inspections regime	Team team inspections

Play Statement

Benefit of risk statement – *The tyre tunnel is designed to fit in with the new tree management centre situated close by to encourage families to engage with our learning messages. Parental feedback and observations highlights that young children are fascinated by our machinery. This play feature is designed to allow them to get hands on with real tractor tyres in a controlled manner to encourage creative and imaginative play. Given the demographic of our families (mostly with children under 10) the feature is designed to encourage parent/child interaction – with clear location so parents can have easy access to both ends and along both sides. Fall height has been kept relatively low, while at the same time still providing young children with a feeling of being high off the ground that will help develop the mental discipline to overcome fear of heights. The feature will not only help improve children's physical ability and mental wellbeing but through social play will improve emotional development. The use of the tyres to form the tunnel is integral to the overall theme of the area. The nature of the feature has a degree of risk but we are content that the benefits and our control measures outweigh this. We will continue to monitor any accidents and review if deemed necessary.*

Risk		Benefits of maintaining the identified risk	Alternative options considered	Decision
Fall from height		The physical challenge encourages children to build their strength, agility and thereby improving their fitness and wellbeing. Children experience the thrill of walking at height. This will help children overcome any fears of height. It also encourages them to consider their boundaries and assess risk. The view across to the Tree Management Centre will encourage children to explore the interpretation and provide a clear link to the theme of the area – this will enable parents to interpret the arboretum's work to their children Social / imaginative play in a natural environment helps emotional development.	Reducing the fall height increasing the cushion fall. (1) Limited by need to maintain tunnel size for good access	Monitor use and any accidents. Review when necessary.
Movement of tyres / finger entrapments		Use of tyres is an integral link to the theme of the interpretation for the Tree management Centre and will encourage further exploration of it. Tyres provide a talking point for discussion Use of real objects in a controlled environment allows young children to explore parts of real machinery in relative safety and provides a sensory tactile experience. This will help them to learn and develop their understanding. They can appreciate the size of our machinery – providing a direct link to a key theme – *big tools for big jobs* By using interpretation in the area to reinforce key safety messages the area will hopefully ensure visitors understand and comply with our rules. Providing the play feature as a means of enticing families into the area will ensure more visitors read these messages.	Construction from alternative material e.g. plastic pipe, wood (1) Would not support the theme or link with our machinery, which is the primary purpose of the tree management centre interpretation zone (2) Alternative materials have their own associated risks Do not construct play feature (1) Reduces the potential interest of area to families and therefore the likelihood of them engaging with interpretation	Bolts to try and minimise movement Monitor use and any accidents. Review when necessary.

Play Statement

Person providing the knowledge / carrying out the assessment	Knowledge or specialism
Ben Oliver	- As Westonbirt's Learning and Participation Manager I specialise in visitor engagement activities including schools, family events, interpretation, volunteer and contractor management. I am trained in writing risk assessments and play area inspections. - I have worked extensively on the development of low key play features at Westonbirt Arboretum including the setting up of play benefit / risk analysis systems and construction design process for identifying and mitigating risks. I have worked extensively alongside Roger Worthington (FC architect and author of guidance on provision of play features at FC sites) and John Ireland and Neil Gresswell (FC H&S Officers) - Additional experience of carrying out risk assessments and setting/managing monitoring standards.
Mark Ballard – Curator Andy Jane – Operations Supervisor Richard Townsend – Tree team works supervisor	- Experience in monitoring tree safety - Practical experience of machinery, fabrication – provided advice on construction of feature and tyre selection
Brian Kedward	- Estates / Building Surveyor with experience of construction and monitoring