



# Programme Committee 29 July 2020

## Appendix A NLHPP – Dashboard Report





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**Please note that this dashboard report and project reports contained in Appendix A of the Programme Update (Part 2) reflect the most recent period-end of 29/05/2020**



# Programme Summary (end of May reporting period)



Completed within previous period:	Look ahead for next period:
<ul style="list-style-type: none"> <li>• <b>Construction remobilisation</b> — All construction activities have recommenced in line with the remobilisation plans developed collaboratively between NLHPP and the contractors.</li> <li>• <b>EcoPark South procurement</b> — EcoPark South tender has progressed through the negotiation phase and Invitation to Submit Final Tenders (ISFT) were issued on time.</li> <li>• <b>Site-wide Intrusive Surveys</b> — This framework has now been awarded to Galdris following completion of the procurement process.</li> <li>• <b>ERF discharge requirements</b> —LB Enfield completed their determination of the discharge requirement application for the ERF.</li> <li>• <b>ERF third party assurance</b>—A formal, independent assurance review, delivered by Fichtner, was completed.</li> <li>• <b>Laydown East contract close-out</b>— A commercial resolution has been agreed and the contract will now move into the defects period.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>ERF tender preparation</b> — The coming period will be extremely busy with the final drafting of the tender documents, with contributions required from across the functions.</li> <li>• <b>EPS Tender</b> – The evaluation will be completed within June following the return of tenders.</li> </ul>
Not achieved in previous period:	Issues for resolution:
<ul style="list-style-type: none"> <li>• <b>Construction activities</b> – As the suspension has continued, the on site activities have not been completed and will follow upon full remobilisation.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Schedule confidence</b> – impacts of COVID-19 are still to be fully understood and key opportunities around interfaces are being examined.</li> <li>• <b>Northern Area Clearance</b> – the feasibility study has highlighted the challenge for a temporary facility of balancing the available space with operational needs. The NLHPP and LEL teams are working closely to find a workable solution.</li> </ul>



# Project Health Check



Project	Cost		Schedule		Risk		H&S		Overall	
	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend
Laydown Area (East) - E1a1	n/a		n/a		n/a		n/a		n/a	
Laydown Area (West) & Eastern Access - E1a2	●	→	●	↓	●	→	●	→	●	
Northern Access - E1b	●	→	●	→	●	→	●	→	●	
Transport Yard - E2a	●	→	●	↓	●	→	●	→	●	
Sewer Diversion (Enabling Works) - E2b	●	→	●	↓	●	→	●	→	●	
Sewer Diversion (Main Works) - E2c	●	→	●	↓	●	→	●	→	●	
EcoPark South – E3a	●	→	●	↓	●	→	●	→	●	
Northern Area Clearance – E3b	●	→	●	→	●	↑	●	→	●	
Utility Corridor and Main DNO connections - E4	●	→	●	→	●	→	●	→	●	
Energy Recovery Facility (ERF) - E7	●	→	●	→	●	→	●	→	●	
EfW demolition and decommissioning - E8	●	→	●	→	●	→	●	→	●	
Southern Access Widening - E9	●	→	●	→	●	→	●	→	●	

See next two slides for key to RAG status



# Project Health Check – Key (1 of 2)



Key	Cost	Schedule	Risk	Overall
●	Overall Project Cost FAC*: <ul style="list-style-type: none"> <li>Is below the Overall Project Cost Baseline by 10% or less.</li> </ul>	The project completion forecasted date (gate 5) is greater than 20 days prior to the baseline date.	Risks generally being closed, mitigation actions and related activities being addressed or progressed. “profile” of risk going down.	A project is assessed as green if its performance does not threaten the NLHPP’s overall objective of bringing the new ERF into service at the end of 2025 or cause the NLHPP baseline budget of £1.13bn to be exceeded.
●	Overall Project Cost FAC*: <ul style="list-style-type: none"> <li>Exceeds the overall Project Cost Baseline by less than 15%, or</li> <li>Is below the Overall Project Cost Baseline by 10–20%.</li> </ul>	The project completion forecasted date (gate 5) is equal to or less than 20 days prior to the baseline date.	A mixed picture of new risks opening while others are closing. Some actions resolving, others stalled or delayed. Risk Profile remaining flat.	A project is assessed as amber if its current plans threaten the overall objective of bringing the new ERF into service at the end of 2025 or cause the NLHPP baseline budget of £1.13bn to be exceeded, but that mitigation plans are in place.
●	Overall Project Cost FAC*: <ul style="list-style-type: none"> <li>Exceeds the overall Project Cost Baseline by more than 15%, or</li> <li>Is below the Overall Project Cost Baseline by 20% or more.</li> </ul>	The project completion forecasted date (gate 5) is greater than the baseline date.	Increasing risk to the project – more risks opening than closed, mitigations and associated activities not progressing. Risk profile increasing.	A project is assessed as red if its current plans threaten the overall objective of bringing the new ERF into service at the end of 2025 or cause the NLHPP baseline budget of £1.13bn to be exceeded, but mitigation plans are either not in place or not yet finalised.

Key	Context
→	No material change in status between the current and previous period
↓	Adverse change in status between the current and previous period
↑	Positive change in status between the current and previous period

Projects with an overall Red status have been included in the deep-dive section of the Part 2 report.



# Project Health Check – Key (2 of 2)



Key	Health and Safety			
	Leading Indicators	Lagging Indicators	COVID-19 Performance	Overall
●	Senior leadership engagement, Positive Behaviours and Safety Observations noted and recorded.	No recorded incidents, accidents or near misses. Any issues are outside the Project’s control.	Complete compliance with CLC SOPs and additional NLHPP suggestions. Visible promotion of excellent practice.	Project will receive a Green RAG if all three indicators are green.
●	Only normal scheduled HS&W advisor site visits and weekly HS&W Snapshots published.	Any recorded accident, lost time or otherwise, or occupational disease (including CV-19 )	Occasional failures to comply with CLC SOPs but are promptly remedied.	Project will receive an overall Amber RAG if one or more indicators are Amber.
●	None recorded	Any RIDDOR incident.	Consistent failures to comply with CLC Site Operating Procedures version 4	Project will receive a Red RAG if two or more indicators are Red

Key	Context
→	No material change in status between the current and previous period
↓	Adverse change in status between the current and previous period
↑	Positive change in status between the current and previous period



# Schedule Dashboard



Milestone (Critical)	Baseline Date	Forecast Date	Deviation to Baseline	Interface	Recovery Plan
Complete works to Hawley Road site (Temp long term LEL Transport Yard)	06-Jul-20	05-Oct-20	-13	Enables start of enabling works to Shaft A	An opportunity has been identified and developed to revise the sewer enabling works such that the sewer diversion contractor can gain access to site on time. This will recover between 12 and 18 weeks of the schedule.
Complete Laydown Area	11-Nov-20	20-Jan-21	-8	Enables new Eastern Access road to open to light traffic.	
Start Sewer Diversion Enabling Works to Shaft A Area on site	17-Jun-20	30-Oct-20	-19	Requires relocation of Transport Yard to Hawley Road	
Complete Sewer Diversion Enabling Works	23-Oct-20	11-Feb-21	-15	Enables access to the Sewer Diversion Main Works contractor.	The above development will provide a consequential benefit for the subsequent projects by reducing the critical path impact. The EcoPark South team are additionally reviewing mitigations to manage impacts of the laydown area potentially being available later than planned.
Start Sewer Diversion Main Works on site	23-Sep-20	11-Feb-21	-19	Requires enabling works to Shaft A area to be completed	
Start EcoPark South Works on site (with some restrictions)	25-Jan-21	25-Jan-21	0	Access to sewer shaft construction area not available until December 2021	
Complete Sewer Diversion work	27-Sep-21	17-Feb-22	-19	Enables access to full EcoPark South work site	
Operational Commencement of RRF	25-Oct-22	03-May-23	-25	Enables transition of existing operations and commencement of Northern Area Clearance.	The schedule does not currently reflect the developing scenarios for the northern area clearance and the ERF delivery strategy which will be incorporated in the next period, following review and agreement by the leadership team.
Northern Area Clearance - Remediation Complete	31-Mar-23	09-Oct-23	-26	Enables the commencement of ERF construction works	
ERF – Commissioning – Take over (O&M engaged in operations)	19-Dec-25	17-Jul-26	-27	Requires construction to be complete.	
EFW – Laydown Area Re-Instatement	19-Jun-30	18-Mar-31	-37	Enables new Eastern Access road to open to light traffic.	
Southern Access Road – Works Complete	14-May-31	21-Jan-32	-36	Requires relocation of Transport Yard to Hawley Road	

Note – COVID-19 has had a clear and immediate impact on the NLHPP schedule with works temporarily suspended, and the knock-on deviation from baseline for the construction works. Less clear is the longer-term impacts of working in a socially distanced environment, and broader economic slowdowns - with potential effects on resource and material availability. Over the next couple of months, this will be assessed and new assumptions developed for the NLHPP programme, at the same time as incorporating activities highlighted in section 2.9



# Risk Dashboard



## Risk Register Summary Statistics

Summary Statistics	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
In-period active risks	368	362	365	362	375	365
Risks raised in period	24	4	6	0	15	4
Risks closed in-period	10	10	3	3	2	14

## Risk count by RAG (score) categorisation

		Risk distribution (Probability x Impact)				
Probability	VH	5	4	3	2	1
	H	1	14	19	16	2
	M	16	23	29	25	17
	L	22	35	28	18	16
	VL	13	17	11	6	1
		VL	L	M	H	VH
		Impact				

## Key risks by impact

Project	Risk Event	Mitigation Control Plan
Programme Wide	Uncertain schedule and/or financial implications to NLHPP following recommencement of site-works	1) Develop agile scenario modelling by using 4D BIM to quickly understand site-wide impacts / traffic movements and improve decision making 2) Progress strategy to de-link ERF from RRF and mitigate any schedule impacts
E3b Northern Area Clearance (NAC)	If the EcoPark South works are delayed it will have a direct impact on NAC programme and ERF.	1) Finalise development of agreed NAC programme and evaluate alternative operational strategies to determine the feasibility of earlier access to the Northern Area.
E7 ERF	Cost and time extent associated geotechnical (pile removal) works is still emerging	1) Undertake non-intrusive and intrusive survey works in Northern Area 2) Tender documentation to include factual information, with information updated progressively around respective site zones

## Key risks by proximity (next 12 months)

Project	Risk Event	Mitigation Control Plan
Programme Wide	Energetik may disrupt NLHPP works due to misalignments and conflicts in construction programme.	1) Close coordination to identify integrated technical solution that all parties can accept (evaluate new proposal) 2) Progress proposed technical solution on SDMW
E3a (EcoPark South Construction)	Enabling works to support operations during EPSC may not be completed in time for construction start on site.	1) Agree programme to design, procure and construct EPSC enabling works pre-contract start on site.
E3a (EcoPark South Construction)	Scope for southern site utilities is immature at current and may change	1) Trial pits to be completed in order to validate utility model and communicate new information to Contractor. 2) Acceptable approach to manage risk to be agreed and detailed through Negotiation phase of Procurement

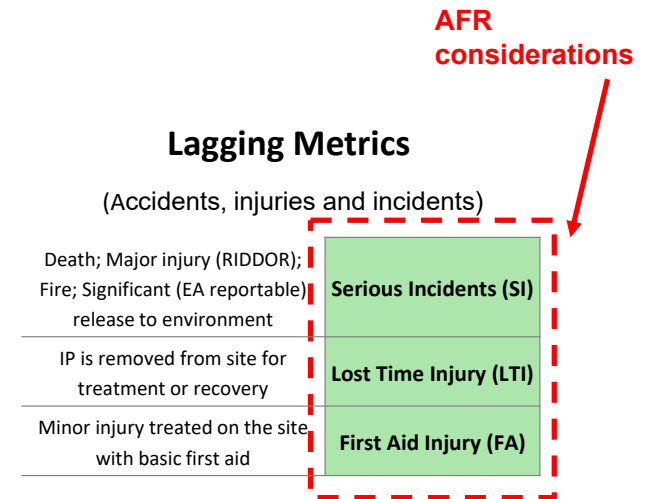




# Health, Safety & Wellbeing Dashboard (1 of 5)



Terminology	Definition	Further Explanation
<b>Leading Metrics</b>	Actions that help to prevent accidents, injuries and incidents	The Health & Safety Executive's (HSE) and others' research has shown that increasing awareness and noting of both good and bad health, safety and wellbeing issues by <u>any and all of</u> the workforce (leading indicators) has shown a significant effect on the reduction in lost time accidents and other untoward events (lagging indicators).
<b>Lagging Metrics</b>	Accidents, injuries and incidents	
<b>Accident Frequency Rate (AFR)</b>	$\frac{[(\text{Number of injuries in the period}) / (\text{Total hours worked during the period})] \times 1,000,000}{\text{i.e. the number of injuries per million hours worked.}}$	The AFR takes into account the first 3 lagging metrics: Serious Incident (SI), Lost Time Injury (LTI) and First Aid Injury (FA), as highlighted in an exert from the Lagging Metrics table.





# Health, Safety & Wellbeing Dashboard (2 of 5)



Leading Metrics	Period May 2020					Period April 2020	Total to Date*
	E1A2	E1B	E2 A	E2B	Total		
Any action or suggestion, idea, behaviour that is 'above and beyond' compliance	2	2	1	0	5	6	89
Anything volunteered and not resulting from a formal assessment or audit. Positive or negative.	2	2	1	0	5	5	52
Site visits by Senior Leadership	0	0	0	0	0	0	0
Weekly site inspection visits by H&S advisors	4	4	2	0	10	6	-

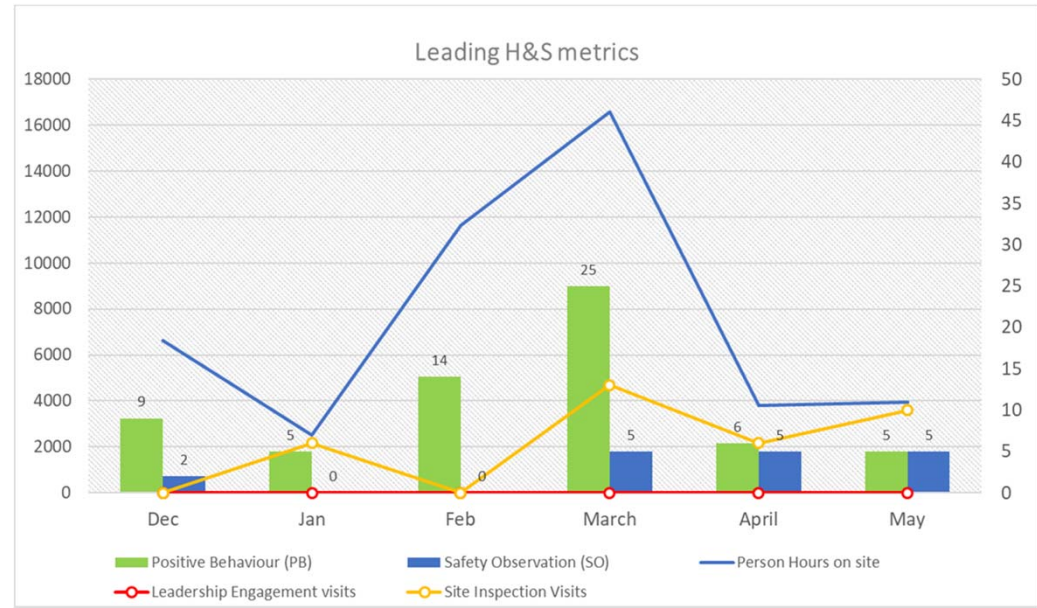


Figure represents the total hours worked on site against leading H&S metrics for each reporting period

	Period May 2020	Period April 2020	Total to Date*
Health, Safety and Wellbeing Alerts	4	4	15

HS&W Snapshot	Date Issued
It's all about the hygiene	1 May 2020
Mental Health Awareness Week	15 May 2020
Kindness	22 May 2020
Cleaning and Hygiene	29 May 2020

\*Total to date: from April 2019 to the end of the reporting period, \*\*\*Construction Leadership Council Site Operating Procedures



# Health, Safety & Wellbeing Dashboard (3 of 5)



Lagging Metrics		Period May 2020					Period April 2020	Total to Date*
		E1A2	E1B	E2A	E2B	Total		
Death; Major injury (RIDDOR); Fire; Significant (EA reportable) release to environment	<b>Serious Incidents (SI)</b>	0	0	0	0	0	0	0
IP is removed from site for treatment or recovery	<b>Lost Time Injury (LTI)</b>	0	0	0	0	0	0	1
Minor injury treated on the site with basic first aid	<b>First Aid Injury (FA)</b>	0	0	0	0	0	0	17
An event not causing harm, but has the potential to cause injury or ill health	<b>Near Miss / Close Call (NM)</b>	0	0	0	0	0	0	14
As RIDDOR	<b>Dangerous Occurrence (DO)</b>	0	0	0	0	0	0	4
Something outside Project control that causes us to take action e.g. nearby fire, flood, site protest, UXB	<b>External Event with Impact (EXT)</b>	2	2	1	0	5	6	34
A set of conditions or circumstances that have the potential to cause injury or ill health, including poor procedures	<b>Undesired Circumstance (UC)</b>	2	0	0	1	3	3	72
Abuse, physical threats or actions short of violence	<b>Threatening Behaviour (TB)</b>	0	0	0	0	0	0	0

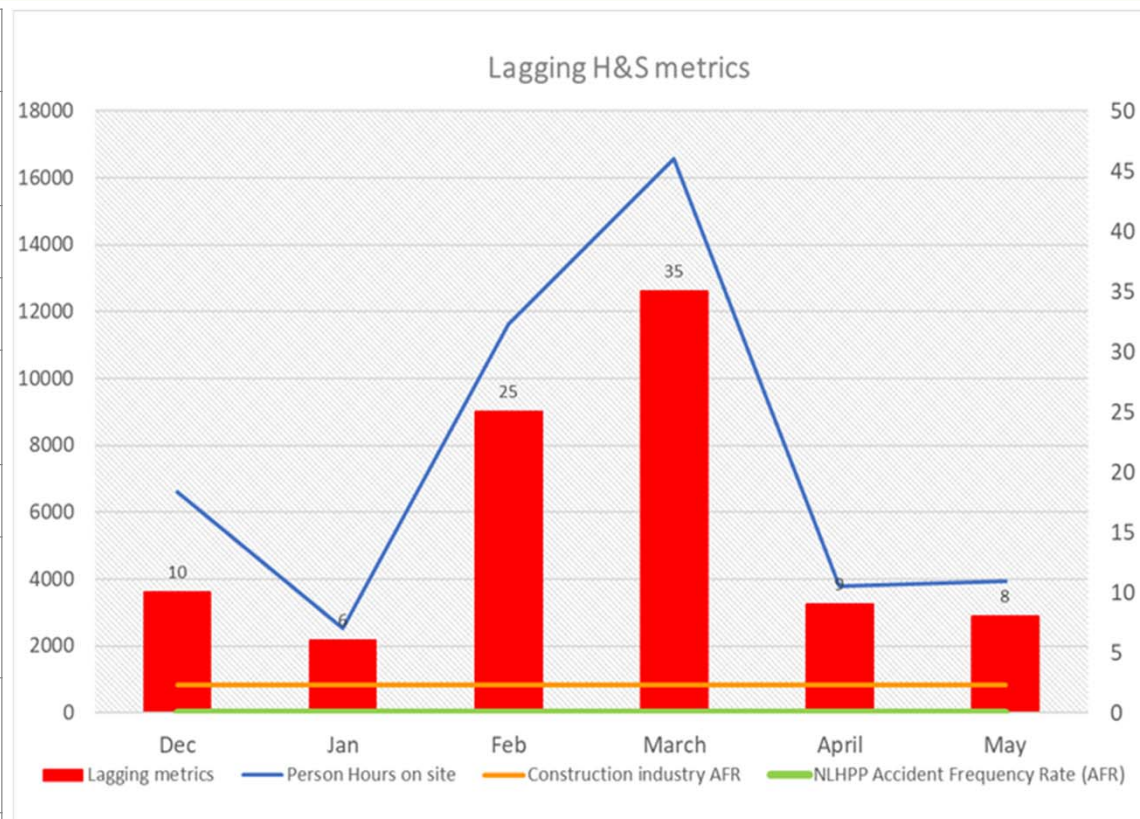


Figure represents the total hours worked on site against lagging H&S metrics for each reporting period and the NLHPP Accident Frequency Rate (AFR) comparing to the Construction industry AFR

\*Total to date: from April 2019 to the end of the reporting period



# Health, Safety & Wellbeing Dashboard (4 of 5)



## Accident Frequency Rate (AFR<sup>\*\*</sup>)

AFR for Reporting Period

NLHPP

0.00

Construction Industry

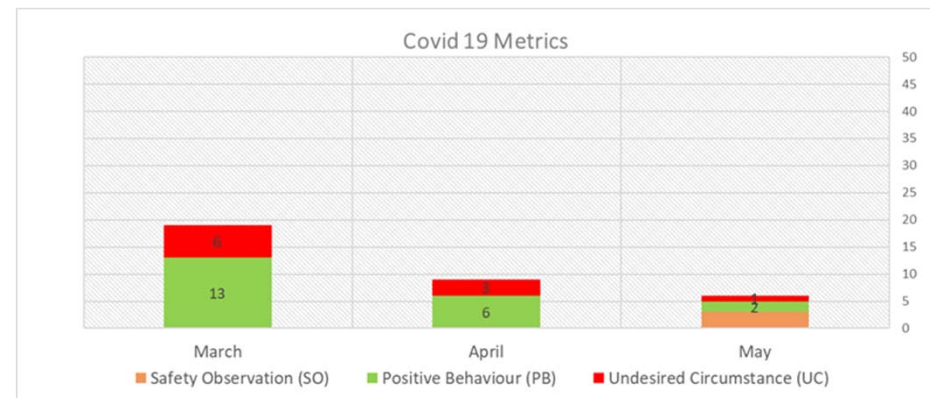
2.32

<sup>\*\*</sup> The Accident Frequency rate enables comparison of accident rates against hours worked rather than the number of accidents. The calculation is (number of accidents) / (number of hours worked on site) x 100 000. Thus, a project with 1 million hours worked and 3 LTIs would have an AFR of 0.3. The values shown above represent the AFR corresponding to the reporting period.

## COVID –19 RELATED (according to CLC SOP<sup>\*\*\*</sup>)

Incidents/Observations related to COVID-19 (positive, negative or observations)—already accounted for in the above incident reporting categories

	Period May 2020					Period April 2020	Total to Date*
	E1A2	E1B	E2A	E2B	Total		
<b>COVID –19 related</b>	2PB, 2SO, 1UC	0	1SO	0	6 (2PB, 3SO, 1UC)	9	32



This figure represents the COVID-19 related metrics for each reporting period

\*Total to date: from April 2019 to the end of the reporting period , \*\*\*Construction Leadership Council Site Operating Procedures



# Health, Safety & Wellbeing Dashboard (5 of 5)



Examples of the identified key incidents on site, including those deemed of particular note by the Health and Safety Team for May, have been tabulated along with their respective response actions.

Site	Key Incidents on Site	Response/Action
<b>E1A2 - Laydown West</b>	(PB) Covid 19 arrangements continue to improve.	Good performance. Just one minor transgression of inadvertent breach of social distancing. Remobilisation plans are good and temperature checks on entry to site will be included.
	(EXT) Security on Lee Parkway	Following April's security and theft issue contractor's further measures have been effective. Site is being monitored by security patrol.
	(EXT) Security from the river Lee navigation	Unauthorised access onto the site remains an issue. Two further incidents recorded in May.
<b>E1B - Northern Access</b>	(PB) Covid 19 arrangements	Good plans in place and opportunity has been taken to check, test and re-calibrate equipment.
	(EXT) Adjacent industrial units.	Adjacent industrial units generating significant noise (metal crushing) and dust (concrete crushing) issues Galdris monitoring.
	(SO) Asbestos cement pipe	Asbestos cement pipe double bagged and stored securely awaiting removal.
<b>E2A - Transport Yard</b>	(SO) Cable tracing	Cable tracing work is imminent.
<b>E2B - Enabling works</b>	Minor activity. Good Covid-19 management including temperature checks. Theft of survey equipment from van on site.	
	Visit carried out at the beginning of April assured us that the site was securely hoarded and in a safe condition.	
	Unable to enter LEL property during most of May. Only one cursory HS&W check. No construction works on this site.	
	(UC) Temporary hoarding surrounding Wash Bay building partially collapsed over w/e of 23rd/24th May—evidence indicates due to unusually high winds.	