



## Campbelltown Hospital Redevelopment

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### Risk Management Plan

Issue Date: March 2018

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### Version History

Version	Date	Issued To	Status
V 0.1	16 December 2017	Root Partnerships	Working Draft
V0.2	19 December 2017	HI	Draft for BC
V1.0	28 March 2018	MoH	For Final Business Case

## 1 Project Background

The NSW Government announced in the 2017/18 NSW State Budget \$632 million for a capital upgrade to Campbelltown Hospital (Stage 2) including a boost to paediatric and mental health services in addition to a range of other acute services. The capital funding is subject to INSW Investment Decision endorsement of the Full Business Case for the project.

A \$134 million major redevelopment of the hospital (Stage 1) was completed in 2015 providing a range of additional facilities to support improved service provision (predominantly within new Building D). However, Stage 1 capital funding could only address 40% of the clinical service needs and priorities identified in the Abridged Clinical Services Plan (ACSP) for Macarthur (2026/27).

Stage 2 planning commenced in 2014 based on the Revised ACSP (2026/27) which showed significant population growth and clinical service demand beyond earlier projections. Extensive consultation resulted in a recasting the clinical services priorities on which the Stage 2 Master Plan was based. The 2014 Master Plan proposed a 4-phase redevelopment of the site from 2014 to 2028 taking Campbelltown Hospital from 377 to 570 total beds at a total project cost of \$999.2 million (Phase 1[A&B] was estimated at \$349.4 million).

The Stage 2 Preliminary Business Case (PBC) was submitted for Gateway Review in December 2014. A number of environmental influences impacted negatively on the adequate preparation of the PBC submission at the time resulting in a number of criticisms (red category) flowing from the Gateway Review Panel Assessment in respect to several review factors, namely: 'Affordability and Value for Money'; and, 'Risk Management'. Against these and other review factors (see Appendix 23), the Assessment Report identified a number of areas for improvement with the recommendation the Project Team undertake additional work in the preparation of the Business Case. The past recommendations have been addressed in the formulation of this Business Case.

The Stage 2 Redevelopment Project was put on hold in 2014/15. In December 2016, the Ministry of Health requested SWSLHD to undertake an accelerated planning exercise to revise previous clinical services planning to meet a new timeframe to 2031 and to inform planning for the Campbelltown Hospital Stage 2 Redevelopment and planning for the Oran Park Integrated Health Hub. Interim outcomes from the Enhanced paediatric/adult interfaces were also to be identified as part of the planning process, along with planning for future Mental Health Services on the Campbelltown Hospital campus.

Revised planning outcomes are presented in the ACSP for Macarthur to 2031 and Enhanced Paediatric Capacity Plan 2031. As a result, Campbelltown Hospital is planned to become a 961-bed facility by 2031/32 based on demonstrated need for: additional mental health beds; reconfigured/expanded Emergency Department; additional operating theatres; expanded ICU; additional medical and surgical inpatient beds; additional renal dialysis facilities; expanded medical imaging capability; expansion of paediatric inpatient/ambulatory care services; and, improvements in supporting non-clinical services and infrastructure.

The future vision for health services in Macarthur in 2031 is for Campbelltown Hospital to become a Tertiary Referral, Role Delineation Level 6 healthcare facility working closely with Camden Hospital and Oran Park Integrated Health Hub to deliver integrated health care services to the region.

## 2 Overview of the Risk Management Process

### 2.1 Risk Management Framework

The risk management procedures and resultant Risk Management Framework adopted for this project is based primarily on the Total Asset Management (TAM) Risk Management Guideline produced by the NSW Government Asset Management Committee which is in turn based on the Australian Standard AS/NZS 31000:2009 – Risk Management Principles and Guidelines. The Risk Register is included in Appendix A of this plan.

Risk assessment and management processes have been developed in accordance with Health Infrastructure (HI) PRC 102 – Project Risk Management Procedure. The main elements of the risk management process are represented in the figure below.

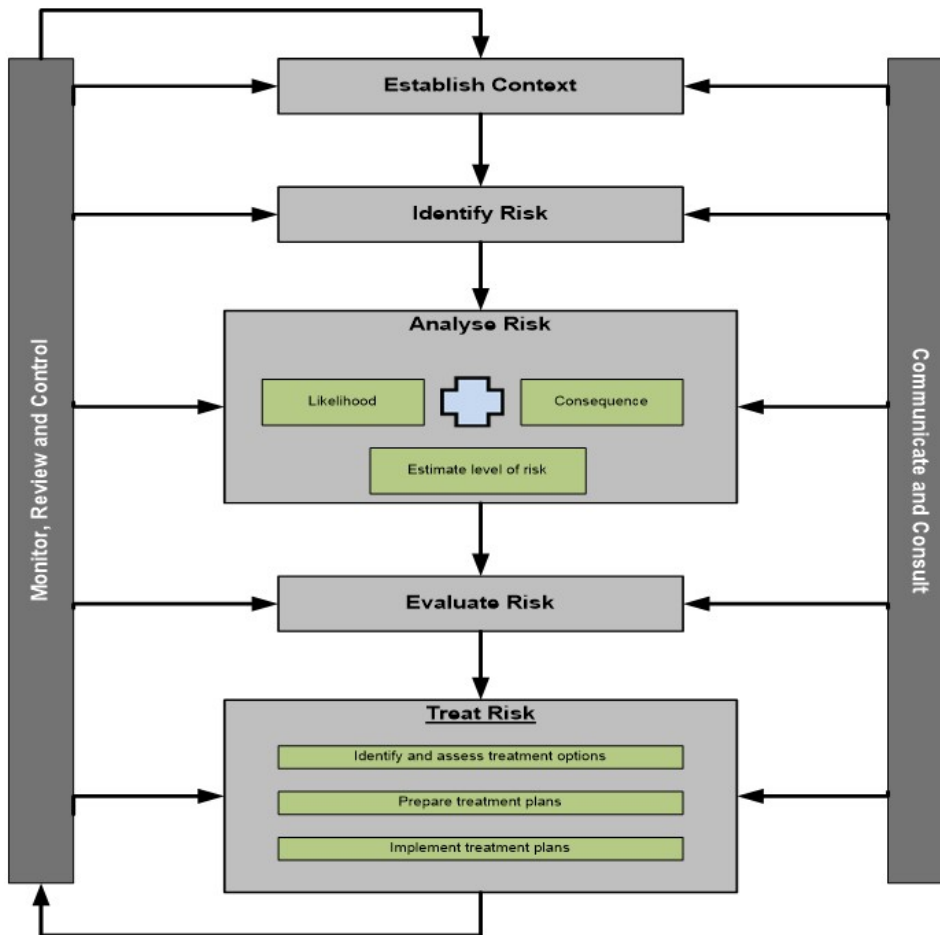
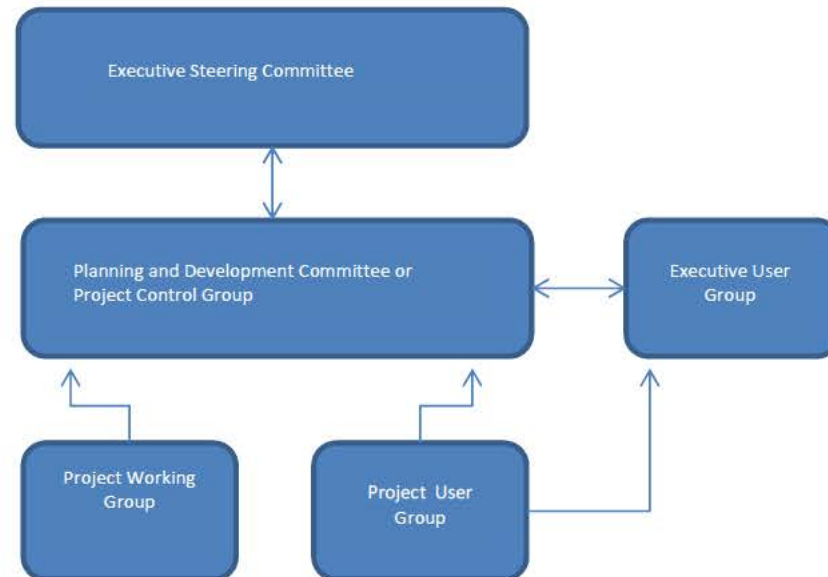


Figure 1- Risk Management Framework

## 2.2 Roles and Responsibilities

Identifying and managing risks is the responsibility of the whole project team. The primary responsibility for managing risks including, the establishment of the Risk Register, ongoing monitoring and review, and closing is the responsibility of the Planning and Development Committee (PDC). This responsibility is detailed in the project Governance and Terms of Reference Document. The Governance structure for the project is shown in the figure below.



**Figure 2 – Project Governance Structure - Planning**

The Project Manager, has prepared a Risk Register in accordance with HI's procedures at the commencement of the project and will monitor the risk management process throughout the project lifecycle.

The Cost Manager, attends Risk Workshops and provides cost advice for project risks. The cost implications will inform the PDC and project on the high risks and the associated implications on the project.

The Risk Management Register is included in Appendix A of this plan. This register records actions to be taken to mitigate and treat the risks, people responsible for risk and includes timeframes.

### **2.3 Risk Analysis, Evaluation and Treatment**

Risk has two components; the likelihood of occurrence; and, the consequences of an event happening. The HI Key Risk Framework details key risks that must be addressed. These have been used to establish the basis for the risk register. Risks are then analysed by combining estimates of consequences and likelihood.

The table below demonstrates the qualitative, quantitative and probability analysis of likelihood

Table 1: Analysis of Risk Likelihood

<b>Qualitative analysis</b>	You expect it will almost definitely be a regular or repeated feature of the project life.	<b>Quantitative analysis</b>	Several times per week	<b>Probability analysis</b>	>95%	<b>LIKELIHOOD</b>	<b>Almost certain (L1)</b>
	You expect it is likely to occur during the project life.		Monthly or several times per year		70 to 95%		<b>Likely (L2)</b>
	You would expect it will occur more likely than not occur during the project life.		Once every 1 to 2 years		30 to 70%		<b>Possible (L3)</b>
	You would expect it will more likely not occur than occur during the project life.		Once every 2 to 5 years		5 to 30%		<b>Unlikely (L4)</b>
	You don't expect it to occur during the project life.		Greater than once every 5 years		< 5%		<b>Rare (L5)</b>

The Table 2 on the following page details examples of consequence specifically in relation to a Health Infrastructure project.

		SUB-CATEGORIES	CONSEQUENCE EXAMPLES				
NSW HEALTH RISK CATEGORIES	CLINICAL CARE AND PATIENT SAFETY		REFER TO SEPARATE CATEGORY "SAFETY AND SECURITY"				
	HEALTH OF POPULATION		NOT APPLICABLE TO HEALTH INFRASTRUCTURE - PROJECTS				
	WORKFORCE		<i>Unplanned stoppage on site or at key supplier premises resulting in critical path delays &gt; 4 weeks.</i>	<i>Unplanned stoppage on site or at key supplier premises resulting in critical path delays between 1 and 4 weeks.</i>	<i>Unplanned stoppage on site or at key supplier premises resulting in critical path delays between 2 days and 1 week.</i>	<i>Unplanned stoppage on site or at key supplier premises resulting in critical path delays between 4 hrs and 2 days.</i>	<i>Unplanned stoppage on site or at key supplier premises resulting in critical path delays less than 4 hrs.</i>
	COMMUNICATION AND INFORMATION	HI - EXISTING HOSPITAL INTERFACE (if applicable)	<i>Loss or permanent damage of major utilities, records, IT data systems and communications resulting in prolonged suspension to an existing AHS service.</i>	<i>Major restriction / damage / prolonged service disruption to some utilities, records, IT data systems &amp; communication within a AHS operational environment.</i>	<i>Temporary suspension of work due to damage to property, assets, records or access to IT or communication systems.</i>	<i>Minor localised damage to property, assets or records and restricted access to IT systems or communication.</i>	<i>Minimal effect on infrastructure, records, IT systems or communication and minimal or no disruption to service delivery or work.</i>
		HI - DESIGN / SCOPE / FUNCTIONALITY	<i>Multiple critical design / functionality non-conformances. Service / Facility offered fails to meet most key expectations.</i>	<i>Critical design / functionality non-conformance. Service / facility offered fails to meet certain key expectations.</i>	<i>Major design / functionality non-conformance. Service / Facility offered fails to meet expectations.</i>	<i>Moderate but fixable impacts to facility operation. Able to be fixed during commissioning.</i>	<i>Minor impacts to health facility operations. Operations may commence and fix later.</i>
	FACILITIES AND ASSETS MANAGEMENT	HI - SCHEDULE (all projects)	<i>Milestone delay exceeds &gt; 3months</i>	<i>Milestone delay 1 to 3 months (inclusive)</i>	<i>Milestone delay 7 days to 28 days</i>	<i>Milestone delay 3 to 7 days</i>	<i>Milestone delay &lt; 48hrs</i>
		HI - ENVIRONMENT	<i>Irreversible large scale environmental impact. Loss of valued ecosystem. Violation of environmental law or regulation resulting in serious litigation, fines and prosecution.</i>	<i>Long-term environmental impairment felt in neighbouring or valued ecosystem functions. Long term remediation required. Major breach of environmental law or regulation with likely major litigation.</i>	<i>Impacts external ecosystem. Some remediation required. Breach of environmental law or regulation with investigation or report to authority with prosecution and/or moderate fine possible.</i>	<i>Short lived or "contained" environmental effect. Minor remedial actions likely to be required.</i>	<i>No appreciable change to environment or a highly localised event that is well contained.</i>
	EMERGENCY AND DISASTER RESPONSE		REFER TO SEPARATE CATEGORY "SAFETY AND SECURITY"				
	FINANCE	HI - FINANCIAL (As % of Estimated Total Cost (ETC))	<i>Final project cost &gt; 1% of ETC</i>	<i>Final project cost between 0.25% to &lt; 1% of ETC</i>	<i>Final project cost between 0.1% to &lt; 0.25% of ETC</i>	<i>Final project cost between 0.025% to &lt; 0.1% of ETC</i>	<i>Final project cost &lt; 0.025% of ETC</i>
		HI - Cash flow	<i>Forecast annual cash flow +/- 20% from planned.</i>	<i>Forecast annual cash flow between +/- 10% and +/- 20% from planned.</i>	<i>Forecast annual cash flow between +/- 5% and +/- 10% from planned.</i>	<i>Forecast annual cash flow between +/- 2% and +/- 5% from planned.</i>	<i>Forecast annual cash flow less +/- 2% from planned.</i>
	LEGAL		<i>Legal claims valued in excess of 1% of the ETC</i>	<i>Legal claims valued between 0.25% and 1% of the ETC</i>	<i>Legal claims valued between 0.1% and 0.25% of the ETC</i>	<i>Legal claims valued between 0.025% and 0.1% of the ETC</i>	<i>Legal claims valued in less than of 0.025% of the ETC.</i>
	SAFETY AND SECURITY		<i>Multiple deaths or life-threatening injuries to any person (including patients).</i>	<i>Death or life-threatening injury/ illness causing hospitalisation of any person.</i>	<i>Serious harm / injury or illness causing hospitalisation or multiple medical treatment cases of any person.</i>	<i>Minor harm or injury to any person where treatment or First Aid is required.</i>	<i>Harm, injuries or ailments not requiring immediate medical treatment.</i>
	LEADERSHIP & MANAGEMENT		<i>Failure to meet critical planning and construction priorities. Sustained adverse state-wide publicity. Significant loss of public confidence, loss of reputation and /or media interest across NSW. Possibility of project cancellation during planning phase or</i>	<i>Failure to meet a significant number planning and construction priorities. Sustained adverse region wide publicity requiring external intervention. Significant loss of public support/ opinion within NSW.</i>	<i>Failure to meet a number planning and construction priorities. Increasing adverse publicity at a regional level. Significant loss of public support/ opinion within the local region.</i>	<i>Failure to meet one or more planning and construction priorities. Adverse publicity at a local level. Periodic loss of public support/ opinion within the local region.</i>	<i>Occasional adverse local publicity.</i>
COMMUNITY EXPECTATIONS / REPUTATION							

## 2.4 Risk Identification

The identification of risk for the project has been developed under the categories of:

- Stakeholders
  - Communication
  - Leadership & Management
  - Stakeholders/Partners
  - Finances
  - Program
  - Governance
  - Political/ Regulatory
- Planning & Design
  - Clinical planning
  - Business case
  - Authorities
  - Planning approvals
  - General facility design
  - Site Options
  - Information Communication & Technology (ICT)
  - Financial
  - Safety in design
  - FF&E and MM&E
  - Program
- Delivery
  - Procurement
  - Site risks
  - Construction EHS
  - Business continuity
  - Commissioning
  - Program
- Hospital Operations
  - Workforce
  - Clinical Care & Patient Safety
  - Technical Risks
  - Access
  - Operations
  - Change Management
  - Operational costs

## 2.5 Risk Matrix and Evaluation

Risks identified were reviewed and assessed according to the following method:

- The methodology of AS/NZS 4360:2004 Risk Management was used to guide the identification of risks and the evaluation.
- Each phase and aspect of the planning and development of the project was scanned for actual and potential risks.
- The likelihood and consequence of each risk was separately assessed.

The basis of the assessment of **consequences** was:

Catastrophic	Very high impact with catastrophic consequences
Severe	Material high impact with major consequences



Moderate Noticeable impact with clearly visible consequences  
 Minor Some minor impact with unimportant consequences  
 Minimal Negligible impact with unimportant consequences

The basis for the assessment of **likelihood** was:

Almost certain Expected to occur in most circumstances  
 Likely Likely to occur in the current period  
 Possible Possible to occur in the current period  
 Unlikely Unlikely to occur in the current period  
 Rare Not expected to occur in the current period

Application of this methodology produces the risk assessment matrix shown in the following table for use in assessing identified risks. All risks are to be evaluated and managed according to this matrix.

		CONSEQUENCE RATINGS				
		Catastrophic (\$1)	Major (\$2)	Moderate (\$3)	Minor (\$4)	Minimal (\$5)
LIKELIHOOD	Almost certain (L1)	A	D	J	P	S
	Likely (L2)	B	E	K	Q	T
	Possible (L3)	C	H	M	R	W
	Unlikely (L4)	F	I	N	U	X
	Rare (L5)	G	L	O	V	Y

Figure 3: Risk Matrix

This assessment is design to overlap the ALARP principle (Figure 3) onto the HI Risk Matrix. Appropriate risk treatment strategies (reduction, transfer, retention) will be developed by weighing the risk against the resources needed to eliminate or reduce the risk 'as low as reasonably practicable' (ALARP).

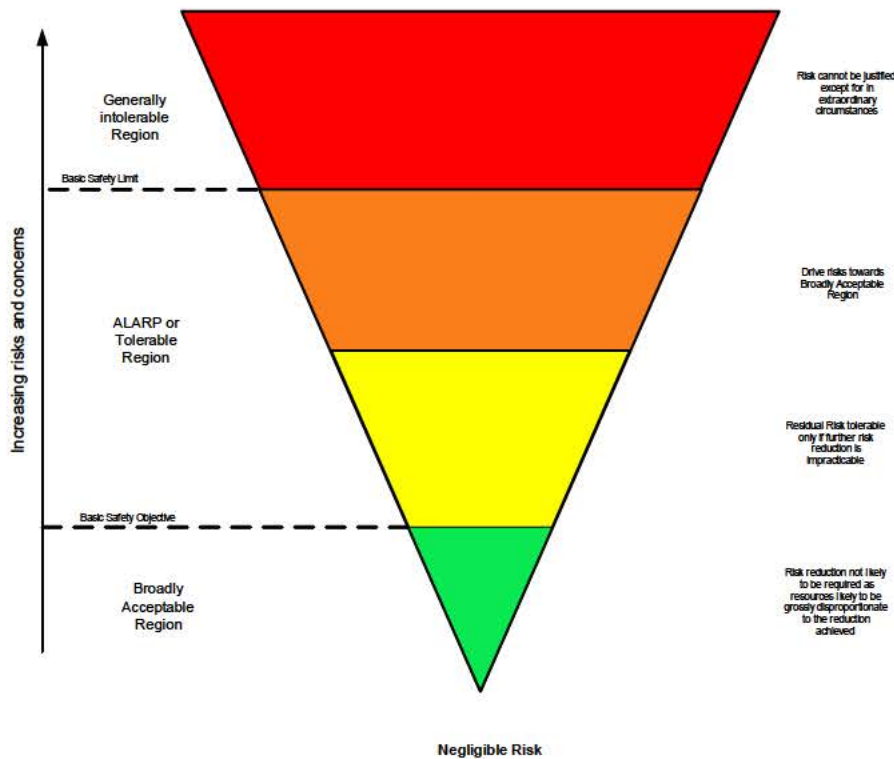


Figure 4: ALARP Principle

## 2.6 Treatment of Risks

Risk Treatment involves:

- Identifying the range of options for treating risks;
- Assessing these options; and
- The implementation of treatment actions.

Selecting the most appropriate option involves ALARP considerations first and foremost and then comparative value for money assessment. Available risk treatments will be classified as follows:

**Risk reduction** - means any action which reduces the risks by reducing the consequences and/or frequency of the incident. It may also include avoidance.

**Risk transfer** - includes all means of shifting to a third party the cost of recovery (or some part of it) following the loss, such as insurance and/or contract provisions. A key part of any risk transfer will be ensuring risk controls and tasks are allocated to those most able to address them.

**Risk retention** - the risk can neither be removed or transferred (residual risk). Often insurance is required to cover the financial consequences of this type of risk.

Finally, all HI risk treatment plans are to include the following aspects:

- Costs associated with all treatment plans for risks and opportunities must be budgeted for within the cost plan
- Nomination of risk treatment owners
- Assignment of due dates for risk treatment actions
- Consideration of treatment options and where appropriate, corresponding value-for-money I cost benefit analysis, and
- Ability to actually control the risks.

## 2.7 Treatment of Safety Risks

In terms of safety risks, if elimination of a hazard is not possible, consideration will be given to developing risk treatment controls that may reduce the consequence and/or likelihood of the risk occurring.

Where risk treatment involves control measures, the risk will be minimised by using the next most effective method in the hierarchy of control. The hierarchy is the preferred way to eliminate or reduce exposure to a hazard (particularly safety), and shall be implemented as follows:

- Elimination of hazard (avoidance, re-design etc.)
- Reduction of the hazard through use of less hazardous equipment, material and/or processes
- Reduction of the risk through administrative controls (e.g. safe work procedures, signs, training to improve the awareness of hazards and personal judgment regarding actions to reduce the associated risks etc.), and
- Reduction of the risk through the use of Personal Protective Equipment (PPE).

In many cases it will be necessary to implement a combination of measures to reduce the risk to a level that is as low as reasonably practicable (ALARP)

## 3 Risk Monitoring and Review

Risk management requires a continuous process of monitoring, reviewing and reporting to facilitate the effective management of existing or new project risk beyond the initial risk register. The responsibility for the risk review, frequency of the review and reporting requirements have been established and adhere to HI PRC 102 – Project Risk Management procedure.

### Review

Review, risk identification and assessment will occur through regular assessment of the risk register. The PDC will convene risk workshops to review risks and confirm them as appropriate and accurate, or amend or finally, mark as "Closed" (Note: closed risks also require review to ensure any changes in circumstances are identified early).

Monitor and review activities are to be undertaken with the aim of achieving the following:

- Review of current key risks.
- Review of risk ratings (particularly post-treatment).
- Review of risk treatment status/ effectiveness.
- Addition of emerging/ newly identified risks.
- Closure (but not deletion) of risks which have expired.

Risk management workshops will be held quarterly at a minimum, and at key project milestones to holistically review the risk register (e.g. prior to construction, following contractor engagement). This process is the responsibility of the PDC to determine frequency, timing and membership to risk management workshops. Some of the key milestones currently identified for the project are summarised in the table below:

Table 3: Key Milestones

Key Milestones
Business Case – Issue to MOH
Schematic Design Finalisation
Town Planning – Submit to Planning Authority
Main Works Contractor Contract Finalisation
Multi Storey Car Park Early Access
Main Building Enabling & Early Works
Commencement of new CSB construction works
Validation and Commissioning of new works
Clinical Services Building – Operational Ready
Cease Services in Building A and relocate to new CSB
Project Overall Completion

### Assessed Cost of Risks

The Cost Manager, will attend Risk Workshops and provided cost advice for project risks. The cost implications informed the PDC and project on the high risks and the associated implications on the project. This cost detail is included within the Risk Register (Appendix A).

Valuations against the risks are assessed against the contingency and this relationship will be demonstrated through the reporting process. Significant milestone points will require more in-depth relationship assessment of risks against the contingency and in relation to the cost plan to ensure cost management.

### Reporting

Regular reporting of project risks will be maintained throughout the project lifecycle in the following forums.

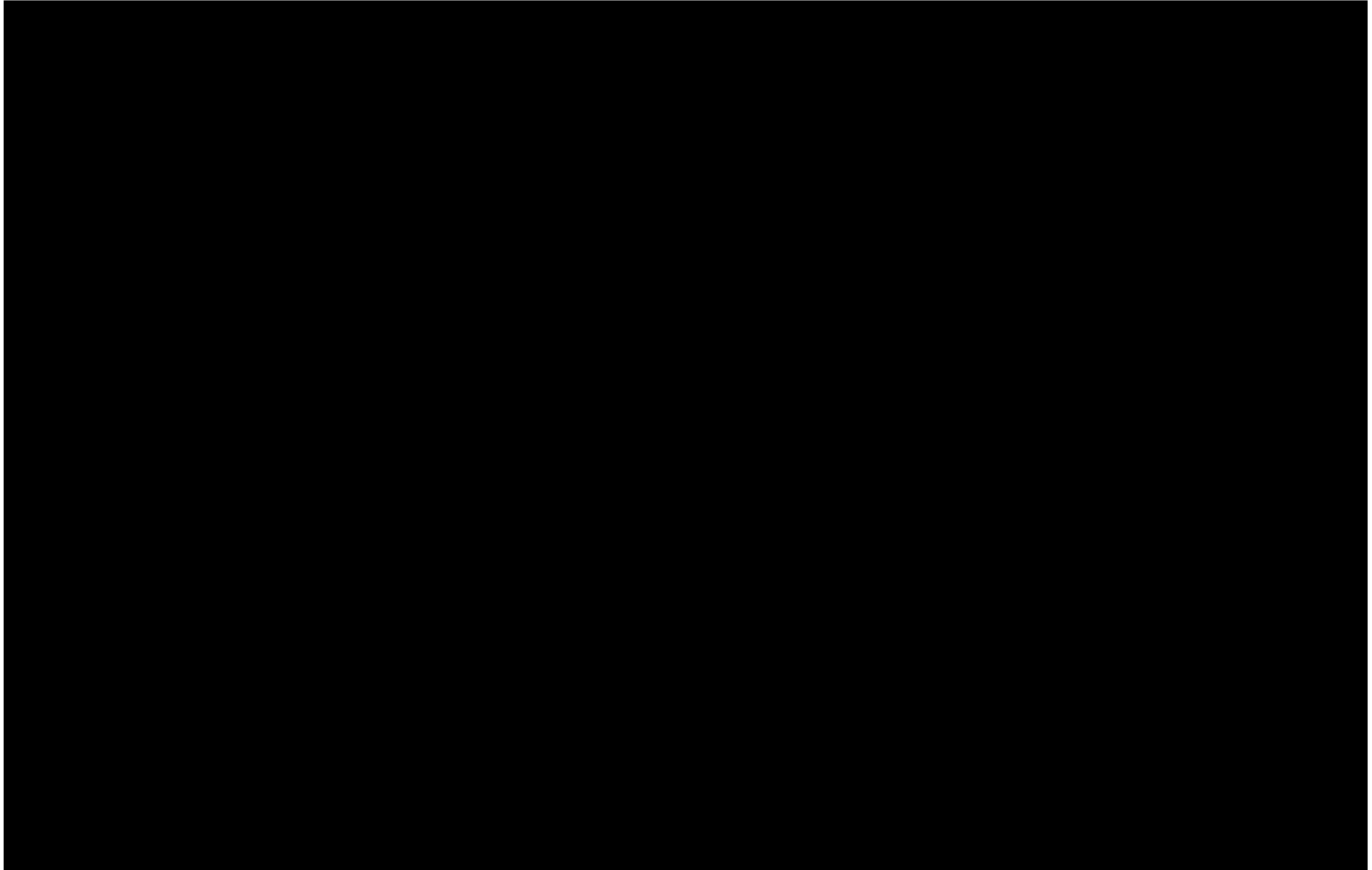
**Executive Steering Committee (ESC) Reports-** are prepared monthly by the Project Manager, include a high-level summary of key and high rated risks, to be reported on at ESC meetings.

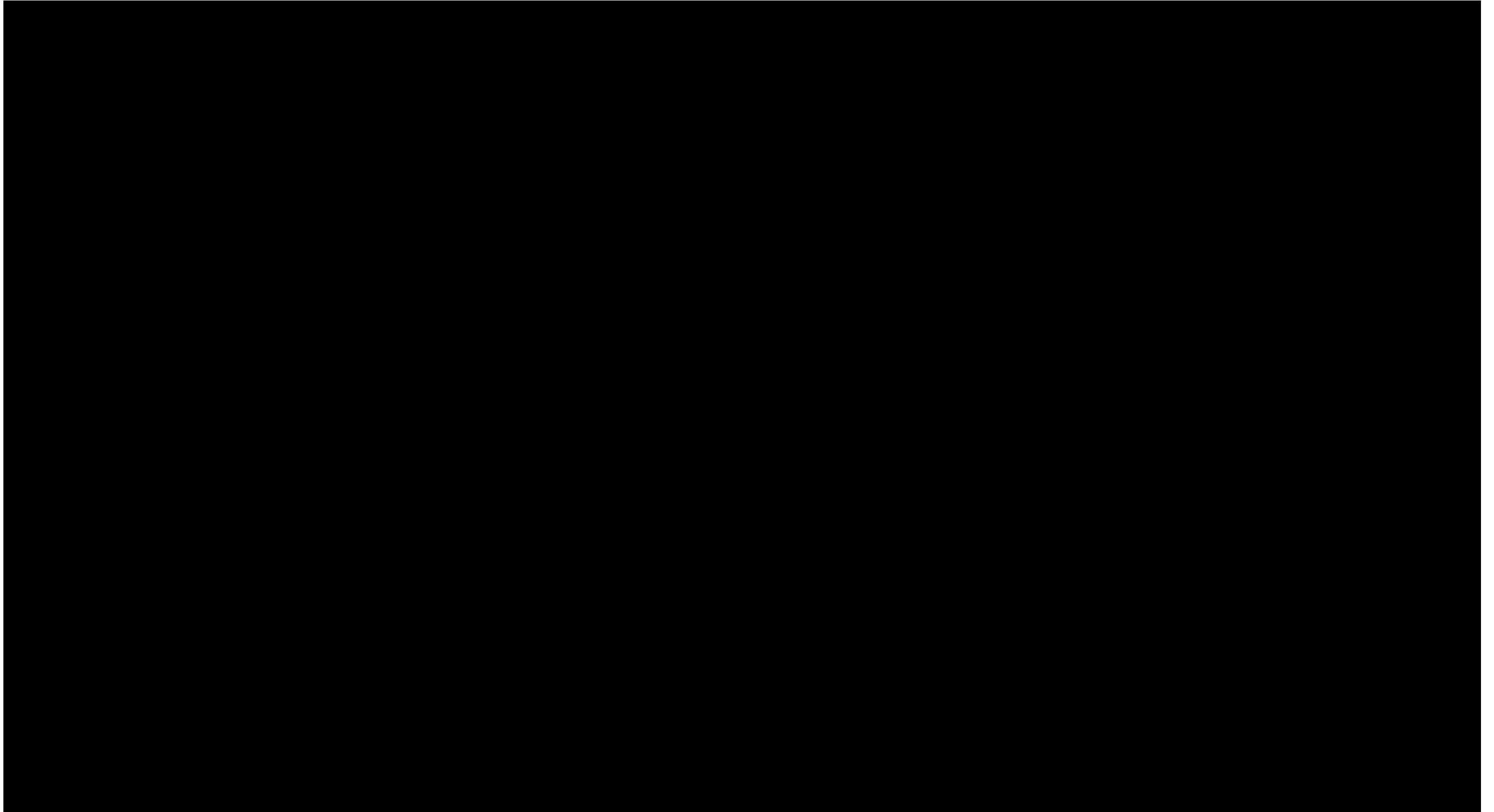
**Planning and Development Committee (PDC) Reports-** are prepared monthly by the Project Manager, and include a both a high-level summary of key and high rated risks and also the full risk register will be included as an appendix. The Cost Manager will also prepare a supplementary cost report to address key financial risks.

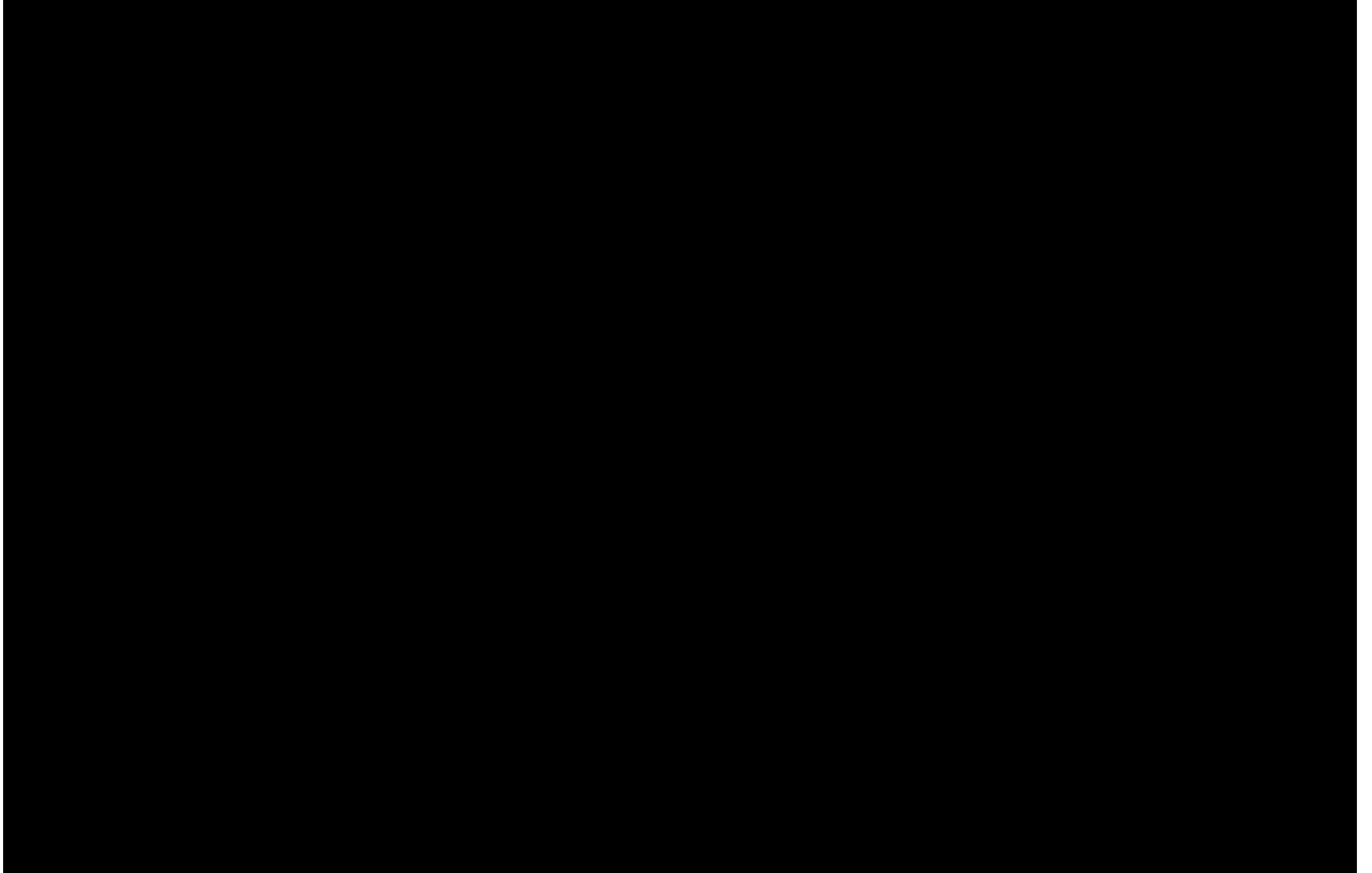
**PRC Reports** – PRC reports are prepared quarterly for HI executive. Reports are prepared through Health Infrastructure's Portal (web interface) and summarise the high rated risks and any risks with a cost implication.

## Appendices

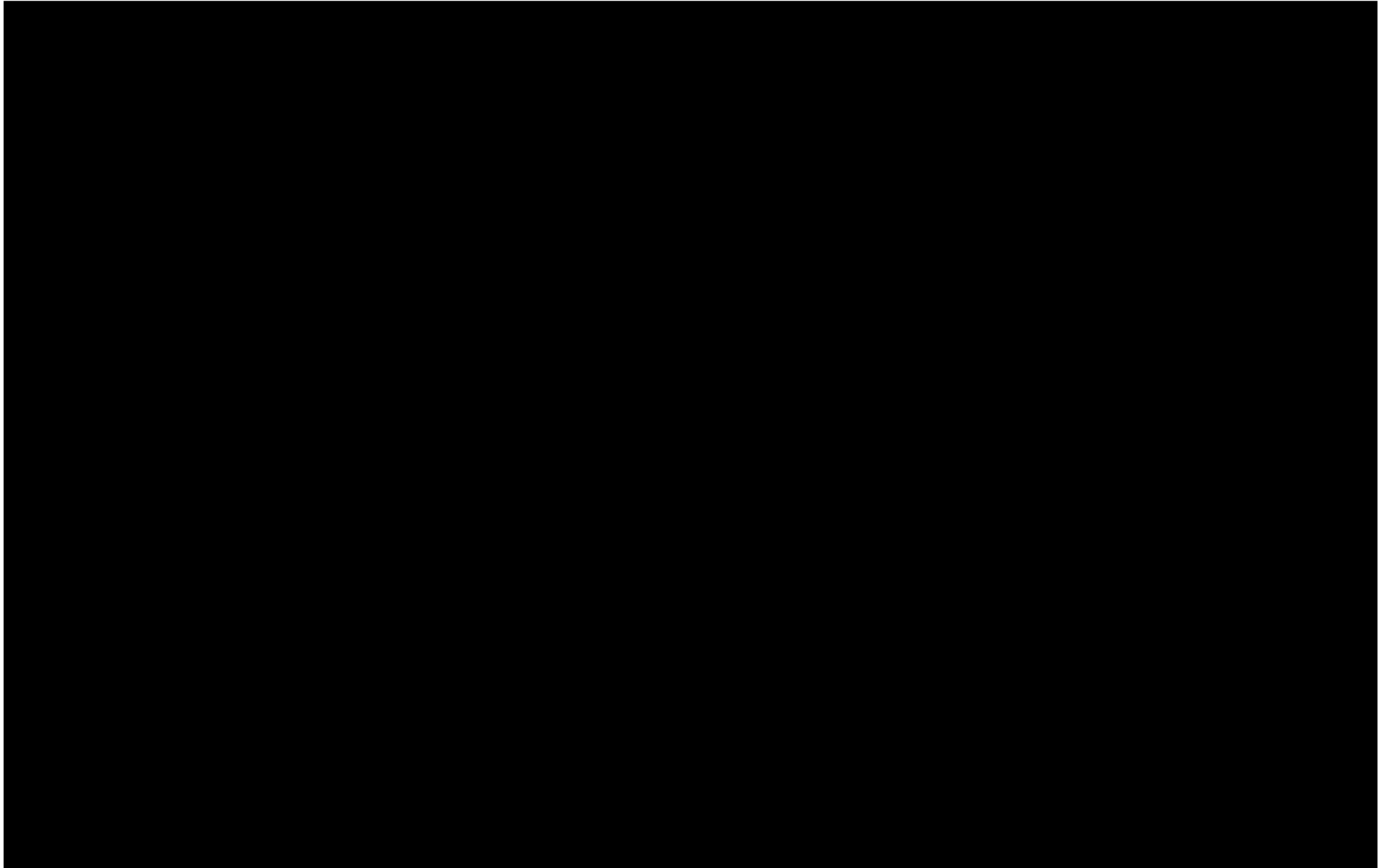
Appendix 1 – Risk Register

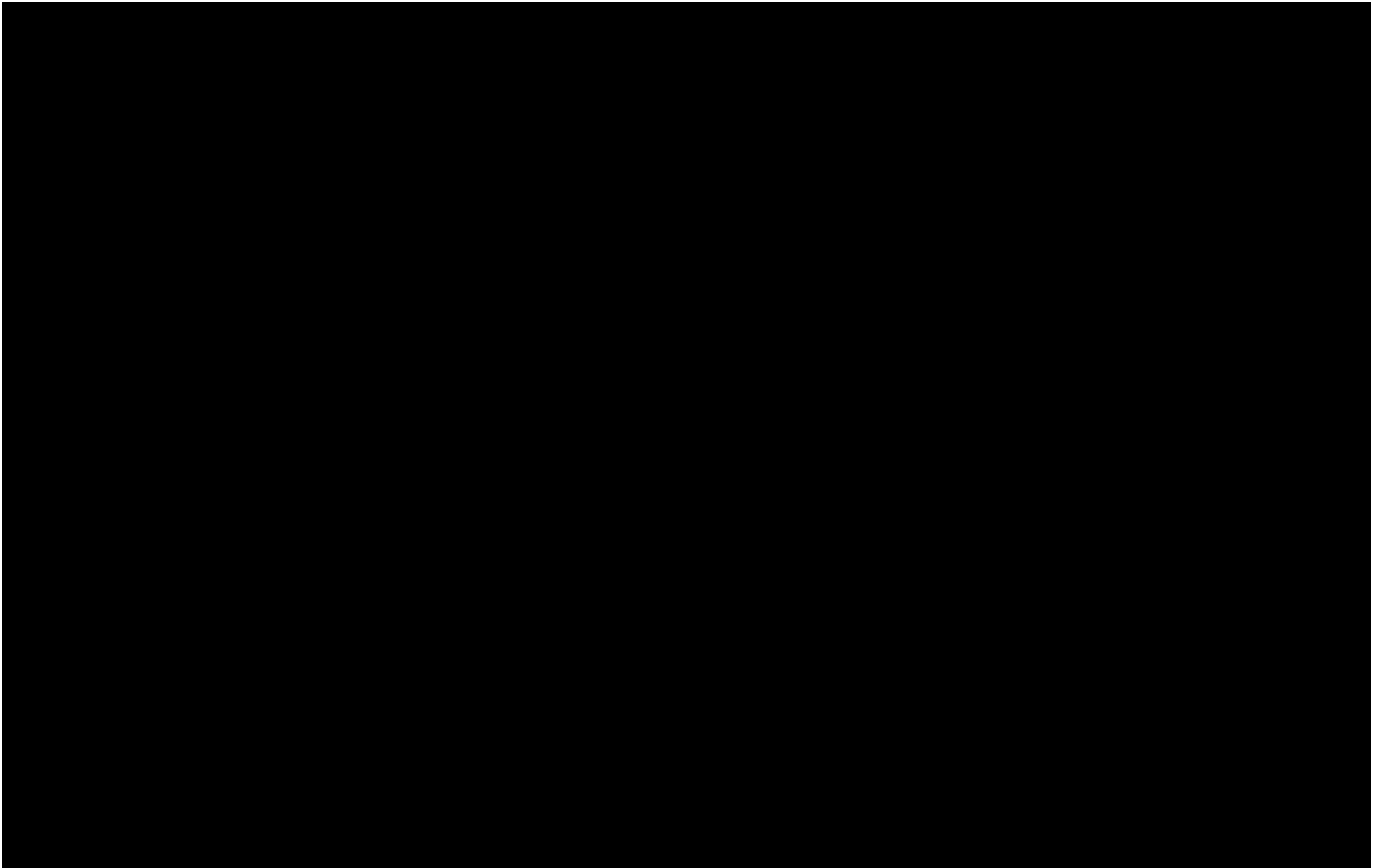












HI Risk Register

Draft Cabinet in Confidence

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