1. **Actions Recommended**

The Board is asked to consider and approve the Asset Management Plan.

2. **Strategic Context**

The Scottish Government’s "Policy for Property and Asset Management in NHSScotland" [CEL 35 (2010)] requires all NHS Scotland bodies to have a Property and Asset Management Strategy (PAMS) which is reviewed and approved by the Board annually. Within NHS Grampian we have designated this as the Asset Management Plan (AMP), which underpins our Clinical Strategy and is aligned with the Financial Plan.

The Asset Management Plan is also intended to demonstrate that the Board can successfully deliver Scotland’s health policies and the shared national ambition to have world leading healthcare services.

The overall aim of this plan is to ensure that the Board’s asset base is the right size, suitable for purpose, positively supports service delivery and enhances service users’ experiences.

3. **Key matters relevant to recommendation**

Building on NHS Grampian’s Clinical Strategy, the future provision of healthcare will be transformed with new models of care, patient access to services, and how access to services focuses invest or disinvest in assets. Our staffing of these services will have to respond to medical and clinical availability, but at all times ensuring appropriate safe patient access to our services in an environment that is fit for purpose and within available resources.

The five year Asset Management Plan sets out the Board’s priorities for managing the infrastructure that will support the delivery of patient care and associated services across NHS Grampian and is integral to the delivery of the NHS Grampian Clinical Strategy.

The plan is focused on actions across four main areas:

- Investment in infrastructure consistent with our strategic health priorities including initiatives to reduce carbon emissions;
- Reduction in high and significant risk backlog maintenance in clinical areas and compliance with statutory requirements;
- Replacement of essential equipment; and
- Disposal of assets declared surplus to requirements.

In terms of allocation of resources the Asset Management Plan recognises the complexity of decisions and choices regarding the prioritisation of available funding.
By taking a balanced approach the five year plan will ensure that we are able to:

- Progress the Clinical Strategy by responding to new and improved ways of delivering services that require fewer assets, services will increasingly be delivered in people’s homes, on an outpatient basis, on a mobile basis and through the use of new technologies such as the Electronic Patient Record and video conferencing.
- Improve estate and asset performance on all key indicators, including a targeted reduction in significant and high risk backlog maintenance and a continued programme of essential equipment replacement.
- Disinvest from buildings with high operating costs, backlog maintenance requirements, or short remaining life where these do not meet future service requirements; and
- Invest and develop in new technology that achieves simplification of the existing information technology infrastructure, whilst simultaneously allowing additional investment and improved resilience.

The financial plan as set out within the Local Delivery Plan and Asset Management Plan confirms how the 5 year programme will be financed from revenue operating budgets, the capital formula funding allocation, charitable donations and asset disposals.

We have assumed a flat formula capital allocation over the five years of the plan. This is in addition to approved brokerage and funding for legally committed schemes and other nationally agreed investment programmes such as the Carbon Energy Fund and hub initiative.

Our infrastructure programme also includes £10.6m of investment to be financed from charitable donations, a combination of individual philanthropic donations for specific projects such as the multi-storey car park and new equipment purchases and ward refurbishment through the Board’s Endowment Funds.

A summary of the immediate investment priorities for the next 5 years is presented in Appendix 1.

A summary of the programme to reduce backlog maintenance is contained in Appendix 2.

In terms of taking forward our plans for the future we welcome and recognise the support and close working relationships we have with colleagues in the Scottish Government, Scottish Futures Trust (SFT) and Health Facilities Scotland (HFS).

4. Risk Mitigation

Approval of the Asset Management plan will assist in mitigating Strategic Risk 855 by ensuring that we implement an asset investment, disposal and backlog maintenance programme or redesign of service provision to reduce dependence on physical buildings.
5. Responsible Executive Director and contact for further information

If you require any further information in advance of the meeting please contact:

**Responsible Executive Director**
- Alan Gray
- Director of Finance
- alangray@nhs.net

**Contact for further information**
- Gerry Donald
- Head of Property and Asset Development
- gerry.donald@nhs.net

24 May 2017

**Additional supporting information**

Asset Management Plan - Printed copies will be made available on request.
Appendix 1: Summary of the 5 year capital plan

Overview

NHS Grampian covers a geographic area of over 8,700 sq.km., and provides services to a population of over 584,000 from an ownership of 26 hospitals, 27 health centres 22 clinics and 5 separate dental units along with 2 hub procured health centres and the health Village with a net book value of £444m. There is over 20,000 items of medical equipment, ICT, vehicles and other equipment with a net book value of over £50m.

<table>
<thead>
<tr>
<th>Owned and Leased Property Assets</th>
<th>Independent Property Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospitals</strong></td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>345,349 sq.m.</td>
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<tr>
<td><strong>Primary Care Facilities</strong></td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>45,280 sq.m.</td>
</tr>
<tr>
<td><strong>Offices</strong></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>8,370 sq.m.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5,403 sq.m.</td>
</tr>
<tr>
<td><strong>Primary Care Facilities</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Equipment Replacement Cost</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Radiotherapy equipment</strong></td>
<td>£6.5m</td>
</tr>
<tr>
<td><strong>Imaging equipment</strong></td>
<td>£25.2m</td>
</tr>
<tr>
<td><strong>Renal dialysis equipment</strong></td>
<td>£1.3m</td>
</tr>
<tr>
<td><strong>Cardiac defibrillators</strong></td>
<td>£1.0m</td>
</tr>
<tr>
<td><strong>Flexible Endoscopes</strong></td>
<td>£6.8m</td>
</tr>
<tr>
<td><strong>Infusion devices</strong></td>
<td>£1.4m</td>
</tr>
<tr>
<td><strong>Other high value items</strong></td>
<td>£70.0m</td>
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<tr>
<td><strong>Total</strong></td>
<td>£112.2m</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Current Net Book Asset Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
</tr>
<tr>
<td>Equipment</td>
</tr>
<tr>
<td>IM&amp;T</td>
</tr>
<tr>
<td>Vehicles</td>
</tr>
</tbody>
</table>

Fig 3.1.1. Overview of NHS Grampians Asset Responsibilities
**Five year investment plan**

Our five year plan is summarised as follows:-

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>17/18 £m</th>
<th>18/19 £m</th>
<th>19/20 £m</th>
<th>20/21 £m</th>
<th>21/22 £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Government Capital</td>
<td>12.7</td>
<td>12.3</td>
<td>10.3</td>
<td>10.3</td>
<td>12.7</td>
<td>58.3</td>
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<tr>
<td>Non Core Government Capital</td>
<td>12.6</td>
<td>0.4</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>32.0</td>
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<tr>
<td>Major project capital funding (indicative)</td>
<td>14.2</td>
<td>81.1</td>
<td>81.8</td>
<td>13.6</td>
<td>4.3</td>
<td>195.0</td>
</tr>
<tr>
<td>Charitable Donations</td>
<td>8.6</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>10.6</td>
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<tr>
<td>Revenue Estate Maintenance Budget</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Asset disposals</td>
<td>4.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53.7</strong></td>
<td><strong>95.8</strong></td>
<td><strong>94.1</strong></td>
<td><strong>44.9</strong></td>
<td><strong>19.0</strong></td>
<td><strong>307.5</strong></td>
</tr>
</tbody>
</table>

**Planned expenditure**

<table>
<thead>
<tr>
<th></th>
<th>17/18 £m</th>
<th>18/19 £m</th>
<th>19/20 £m</th>
<th>20/21 £m</th>
<th>21/22 £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>12.7</td>
<td>1.2</td>
<td>4.8</td>
<td>23.2</td>
<td>0.2</td>
<td>42.1</td>
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<tr>
<td>Major Hospital Developments</td>
<td>14.2</td>
<td>80.9</td>
<td>81.8</td>
<td>12</td>
<td>0</td>
<td>188.9</td>
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<tr>
<td>Backlog maintenance</td>
<td>11.6</td>
<td>4.4</td>
<td>1.3</td>
<td>1.1</td>
<td>1.5</td>
<td>19.9</td>
</tr>
<tr>
<td>Equipment –new &amp; replacement</td>
<td>6.0</td>
<td>8.7</td>
<td>5.6</td>
<td>8.0</td>
<td>16.7</td>
<td>45.0</td>
</tr>
<tr>
<td>Other</td>
<td>9.2</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>11.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53.7</strong></td>
<td><strong>95.8</strong></td>
<td><strong>94.1</strong></td>
<td><strong>44.9</strong></td>
<td><strong>19.0</strong></td>
<td><strong>307.5</strong></td>
</tr>
</tbody>
</table>

In terms of the next five years of our infrastructure investment programme we would highlight the following:

**Primary and Community Care investments**

We have a comprehensive primary care premises strategy which sets out our priorities across the Grampian area, taking account of the functional suitability and capacity of existing premises and emerging new settlements in line with local development plans. We remain committed to our investment in modern new build facilities with the following projects confirmed:

- the replacement of the Inverurie Health Centre including a new local x-ray facility and establishment of a community maternity unit
- the replacement of the Health Centre at the Foresterhill Campus
- relocation of the Denburn Medical Practice
- further £19m equivalent through the Hub initiative targeted at new premises in North Aberdeen City and surrounding neighbourhood areas within Aberdeenshire.

We will continue to seek to identify alternative sources of funding to meet priority developments in line with the primary care premises strategy.

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1 The actual profile of funding for these projects will be confirmed on approval of the final business cases.
Major hospital development investments

The Board is progressing the plans for the following major hospital developments:

- the Baird Family Hospital which will replace the existing maternity hospital, breast screening, gynaecology and neo-natal facilities.
- the establishment of the ANCHOR Centre, adjacent to the existing radiotherapy building on the Aberdeen Royal Infirmary site.
- new Diagnostic and Treatment Centre to meet future requirements for elective capacity across Grampian.

Reduction in backlog maintenance and statutory compliance

Our planned investment programme in respect of backlog maintenance fits clearly with NHS Grampian’s strategic theme of delivering high quality care in the right place and a commitment by the Board to reducing high and significant backlog maintenance risks within the inpatient accommodation at Aberdeen Royal Infirmary (ARI). The planned work will also enable the reconfiguration of services consistent with the Health Campus Programme Initial Agreement and the Foresterhill Development Framework approved by the Grampian NHS Board in 2008.

The level of backlog risk is estimated to reduce from £193.4m at 1 April 2012 to £132.8m at 1 April 2022, an overall reduction in backlog of £60.6m (31%) and is anticipated to be delivered through a combination of targeted expenditure initiatives, asset disposals and site rationalisation. This position is broadly in line with our original plan, after adjusting for the impact of inflation.

Of the total backlog risk at April 2012 (£193.4m) £19.8m was classified as very high risk and £56.4m high risk. Very high risk backlog will reduce by £15.7m (79%) and high risk by £36.5m (65%) by 2021.
After 2021, the backlog reduction will focus on the remaining key areas which include the laundry and central sterile services facility, theatre ventilation (across all sites) and Royal Cornhill Hospital.

Planned work programmes have also been developed following extensive consultation with the Scottish Fire and Rescue Service across all our properties, informed by structural, mechanical and electrical survey information. A series of other work programmes are planned to address recommendations from Scottish Fire and Rescue Service across a number of our properties. It is assessed that the value of backlog risk that will be eliminated by these fire prevention programmes will be £1.9m.

**Replacement of essential equipment**

A key element of our capital programme is the replacement of essential equipment and critical assets within our clinical and non-clinical services. We have had significant engagement with clinical services in order to assess and prioritise available funding to target essential equipment replacement.

In terms of planning within a five year context, we have developed an equipment replacement strategy, informed by a comprehensive assessment of risk. Given the commitment to the backlog maintenance within the Aberdeen Royal Infirmary over the next two financial years, the funding available for supporting a rolling replacement programme will be limited.

From 2018/19 onwards, additional resources have been allocated to support the replacement of medical equipment and information technology assets informed by the risk assessment within the equipment replacement strategy.

**Disposal of surplus assets**

A key element of the delivery of our capital plan is achievement of our programme of disposals of surplus assets. This programme has now been agreed with the Scottish Government and delivery of the required actions is monitored closely by the Board’s Asset Management Group.

Grampian has also seen the decommissioning of a number of aged and functionally unsuitable properties over last 20 years, such as:

- Old Rhynie Surgery
- House of Daviot Hospital
- Morningfield Hospital
- Tor-na-dee Hospital
- Ladysbridge Hospital
- Maud Hospital
- Woodend Annexe
- Woodcot Hospital
- Woodlands Hospital
- Old Glen o’Dee Hospital
- Kingseat Hospital
- Old Westhill HC
- Old Portlethen HC
- Arduthie Hospital
- Part of City Hospital
- Bilbohall Farm
- Old Royal Cornhill Hospital
- Old Forres HC

Despite the investment and disinvestment over the last 20 years: 38% of NHS Grampian property portfolio remains over 50 years old. These properties are mainly in the acute sites of Foresterhill Campus and Woodend site, and our Community Hospitals throughout Grampian.
**Sustainability**

In December 2015 we signed the contract for the Carbon Energy Fund (CEF) project. NHS Grampian will benefit from investment in infrastructure estimated at approx. £15.6m over the 25 year life of the contract (£10.4m of initial investment with £5.2m lifecycle replacement of lights and chiller units throughout the contract period). An overall reduction in carbon emissions of 16% is anticipated.

A significant component of the contract is the creation of an energy link between Foresterhill and Royal Cornhill Hospital which will also allow all areas of the Foresterhill site to be serviced from the main Combined Heat and Power Plant. We expect this project to be fully operational in September 2017.

**Priorities for further investment**

Whilst acknowledging the significant funding made available for the Baird Family Hospital, ANCHOR Centre, Diagnostic and Treatment Centre and primary care developments, the Board has set out within the asset management plan priorities for further investment in the following areas over the next 10-15 years:

**Medical Equipment**

Within the context of our 10 year plan, we are developing a detailed equipment replacement strategy informed by a comprehensive assessment of risk. We have committed £3m in 2017/18 rising to £6m in each of the following three years for essential equipment replacement. Whilst equipment can be used and maintained beyond the depreciated life, a planned replacement medical equipment programme is challenging within the Board’s current level of capital allocation.

**Community and Primary Care Premises**

Based on the Local Development Plans for Aberdeen City, Aberdeenshire and Moray, the number of new housing units is anticipated to increase by over 40,000 by 2023, with the potential for an increase in patient population of between 80,000 and 100,000. Our GP premises strategy identified a need for investment in additional infrastructure in excess of £100m to meet the demands that these new and emerging communities will place on our primary and community based services. We will continue to advocate for Developer Contributions where appropriate to support proportionate development needs and to seek further national infrastructure funding to support service redesign and transformation within the community.

**Acute Sector Infrastructure**

Together with an ageing estate, and a growth in demand for services, the 10 year asset plan as reflected within the Asset Management Plan has identified the need for priority investment in a number of key areas within our acute sector infrastructure – MRI capacity; laboratory and medical equipment accommodation; replacement laundry and Central Decontamination Unit; and new mortuary accommodation. Furthermore, the full replacement of the theatre block and remaining inpatient capacity requires to be addressed within 15 years.
Appendix 2: Reducing backlog maintenance

Overview

Completion of the Emergency Care Centre (ECC) in December 2012 created the turning space to undertake essential backlog maintenance in the areas of Aberdeen Royal Infirmary (ARI) which are to remain as inpatient facilities i.e. the East End 2 and Phase 2 buildings. Work is now planned within Phase 1 block at Aberdeen Royal Infirmary.

The overall programme at ARI is underpinned by a complex series of service moves, a “decant plan”, which is agreed on a stage by stage basis by the clinical leaders and the Acute Sector Leadership Team. The decant plan aims to ensure services move no more than once prior to occupying their permanent accommodation.

Care has been taken to ensure service users are fully involved in the design and delivery of the programme and that key actions necessary to minimise Healthcare Associated Infection risk are included. Where services are required to vacate areas of the property to allow the work to be undertaken then full advantage has been taken of this opportunity to redesign and reconfigure services for maximum efficiency. An example of this is the consolidation of surgical High Dependency Unit (HDU) beds on a single ward which will greatly improve access to quality high dependency care for post-operative patients.

An additional consideration is the invasive nature of the works and the impact that this will have on clinical services. It is not therefore practical to focus only on the high and very high risk areas but rather each element of the programme must be balanced appropriately to ensure that all essential maintenance in a particular area is completed including, where necessary, works to support service reconfiguration to ensure there is no adverse impact on the quality of service as a consequence of the works.

Work Programme

Key elements of the work programme to reduce backlog maintenance are noted below:

East End 2 Block ARI

The programme of works associated with the East End 2 was approved by the Grampian NHS Board in September 2013. The final cost for this works package was £5.6m with all work complete and services operational in their new accommodation by December 2014. The backlog risk eliminated on completion of this programme was £1.3m, with some £2m of backlog still remaining.

Phase 2 ARI

The scope of the works programme for ARI Phase 2 was complex. To manage the dependency on asset disposals to fund the programme, the Board agreed the works packages would be delivered in separate stages.
Detailed designs and a final target price for the first, second and third stages including variations to re commission the Emergency Department theatres and create a new Aseptic Pharmacy facility were previously approved by the Board. The stages completed to date are set out below:

- **Stage 1** including the re-commissioning of two operating theatres in the old Emergency Department was £11.9m and all work was completed with services operational by October 2015.
- **Stage 2** was completed in June 2016 at a cost of £6.7m and
- **Stage 3**, including the new Aseptic Pharmacy suite at an estimated cost of £10.6m.

A detailed design and final target price of £4.3m has now been agreed for Stage 4. This will focus on Wards 204, 205 & 206 – Neurosciences and will complete the refurbishment of all inpatient accommodation at ARI by December 2017.

The outstanding work to complete the programme in the Phase 2 relates to non-clinical areas in the basement, including Pharmacy and Medical Records. The intention was to progress the backlog maintenance and also a redesign of this accommodation. However the impact of the downturn in the local property market on our asset disposal programme has meant we have had to re-assess the scope of this phase of works. Consequently the scope of works for the basement level has been amended to only works necessary to comply with statutory fire regulations including, fire doors, emergency lighting, fire dampeners, fire compartments, mains power distribution and ability to meet other statutory Healthcare Associated Infection (HAI) / Health and Safety Executive (HSE) requirements. The budget for the reduced scope of works is £5.3m. This work will commence in December 2017 and will complete in October 2018.

The backlog to be eliminated once the programme is completed in Phase 2 is quantified at £13.2m. The estimated backlog remaining is £18m, of which some high risks remain.

**Phase 1 ARI – Relocation of Eye Outpatient Department (EOPD)**

The Board recently approved investment of £6m in the initial stage of this project, focussing on a programme of works to enable relocation, and subsequent demolition, of the existing Eye Outpatient Department (EOPD).

Relocation of the EOPD provides an opportunity to add value to service provision from co-locating two ambulatory components of the Ophthalmology Services: the EOPD and the Cataracts Procedure Room (which will transfer from the Short-Stay Theatre Suite). This is possible due to the increased floor area and a more efficient design that improves patient flow. The new accommodation will be designed to ensure future flexibility as the service changes and grows to meet future demand.

The project will include upgrading of the lifts in Phase 1 which is a critical part of the infrastructure and requires significant refurbishment in order to extend their useful life. It is estimated that these works, when complete, will eliminate £1.9m of backlog from the risk register. Backlog remaining will be £18m, but this will be reassessed in line with the Board’s Clinical Strategy.