

# MAZE/LONG KESH MASTERPLAN AND IMPLEMENTATION STRATEGY



FINAL REPORT  
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# EXECUTIVE SUMMARY

## INTRODUCTION

1. This report sets out a Masterplan and proposed Implementation Strategy for the development of the Maze/ Long Kesh site. It provides a fully integrated framework for development that takes into account the recommendations of the cross-party Maze Consultation Panel, key individual project requirements and site wide transport and utilities infrastructure needs.
2. The report and its recommendations are purely advisory and convey no intention on the part of government to accept all or part of the outline plan envisaged in this document. Rather the report presents a set of proposals for consideration by government, subject to all due diligence and the application of statutory processes should it wish to pursue the regeneration of the site on this basis. The proposals and recommendations set out in the report are the responsibility of the masterplanning consortium and do not purport to represent in any way the views of individual government departments or the government. The costings are indicative only and are all subject to more detailed appraisal. The publication of this report does not bind any government body to any financial undertaking or commitment.
3. The development of the Maze/Long Kesh former prison and security site is being considered under the Reinvestment and Reform Initiative (RRI). Regeneration of the site offers the potential to bring significant long term social and economic benefits to the whole community. The overall objective is to provide a physical expression of the ongoing transformation from conflict to peace and to provide an inclusive and shared resource for the whole community.
4. The development of the International Centre for Conflict Transformation including the listed prison buildings offers a practical opportunity to those seeking assistance in establishing a conflict resolution process in their own country by drawing on the experience and history of the peace process. The development of the Maze/ Long Kesh also

offers the potential for the region to participate as hosts in the Football Tournament in the 2012 Olympic and Paralympic Games but this would be dependent on progressing scheme development and securing necessary approvals within a tightly defined timescale. Our overall vision for the site is:

*‘a development of regional significance with a vibrant and successful mix of uses which builds on the area’s significant historic, strategic and environmental assets and creates a distinctive destination offering a range of opportunities for the whole community’.*

5. The Masterplan builds on the work of the cross-party Maze Consultation Panel which recommended that the Government bring forward innovative and sustainable development proposals to provide an internationally recognisable physical expression of the ongoing transformation from conflict to peace and to provide an inclusive, shared resource. The Masterplan seeks to:
  - Bring forward innovative and sustainable development proposals to meet social and economic regeneration and equality objectives;
  - Link individual projects and sites through the provision of necessary infrastructure, strategic landscaping and high quality public realm;
  - Prepare a creative and deliverable Masterplan with genuine capacity to develop and regenerate the Maze/Long Kesh site and secure the long term aspirations for the area.

## KEY ISSUES

6. The baseline studies have highlighted a range of constraints and opportunities. The Masterplan seeks to address these constraints and to capitalise upon the opportunities.

## CONSTRAINTS

7. A combination of constraints has been identified which would influence the development mix and quantum and

timescale for development, particularly in relation to current planning policy and infrastructure capacity.

- Whilst development of regional significance would be acceptable in accordance with the Draft Belfast Metropolitan Area Plan (BMAP), there is a presumption against other development. Any significant housing development might only be acceptable in the longer term depending on the outcome of a formal review of the housing indicators in the Regional Development Strategy (RDS) and a mid-term review of BMAP. This would impact on potential land uses in the current plan period to 2015;
- Redevelopment could result in the displacement of development from other areas. It would be necessary to ensure that development is complementary and would not prejudice regional development objectives as set out in the RDS;
- Existing infrastructure and services serving the site are at capacity and there would be a requirement for significant investment in new infrastructure provision;
- There is limited road access and a current lack of public transport services to the site. Significant investment in new transport infrastructure would be required to accommodate site development;
- There is currently a lack of critical mass within the local population to ensure the viability of community facilities;
- Listed prison buildings and structures, because of their fixed position, would constrain site layout and access. It would be necessary for the Masterplan to integrate the listed prison buildings and to provide an appropriate setting for them
- There is some limited ground contamination and a requirement for appropriate site remediation;
- The proximity of the River Lagan and surface waste drainage would be important in relation to dealing with run-off and water treatment;

- Whilst generally there is a lack of natural features, there are mature trees on the site which should be retained;
- The site has a significant visual impact, especially from the south, on near, medium-distance and far views. The Masterplan would be required to minimise impacts of new development on the landscape; and
- Noise pollution and air quality due to proximity of the motorway would restrict development opportunities on the southern edge of the site.

**OPPORTUNITIES**

8. A number of opportunities are presented by the site due principally to its strategic location, size and relationship to the wider area.
  - The site is identified as a site of regional significance. The RDS seeks to facilitate development projects which would enhance the external competitive advantage of the region and to accommodate economic development of regional or sub-regional significance;
  - There is the opportunity to incorporate an element of appropriate enabling development in the period up to 2015 (say in the region of 200 residential units). It would also be possible to look at a phased development of the site in the context of future plan review beyond 2015, subject of course to the relevant planning context that applies at that time;
  - Provision for local enterprise, knowledge and high-tech could diversify the industrial and commercial provision and contribute to regional development objectives;
  - Development provides the potential to promote access to new social and economic opportunities on the site for nearby deprived urban communities, Twinbrook, Seymour Hill, Poleglass, Knockmore, Lagmore and Old Warren;
  - The listed prison buildings provide the potential to build on the historical significance of the site and to create a unique environment;

- The site provides the potential to create a new focus for community integration in accordance strategic objectives;
- Redevelopment could expand and diversify the area's commercial, leisure, tourism and cultural provision in accordance with the objectives set out in the RDS. Cultural links to other amenities and to Hillsborough, Lisburn and Greater Belfast along the Lagan would support potential tourist uses;
- The provision of new road infrastructure and public transport facilities could have benefits for the wider population and integrate the development with the wider area;
- The site provides the potential for the promotion of sustainable development including sustainable drainage systems, water treatment, renewable energy production and sustainable construction methods, including the potential utilisation of the aquifer under the site;
- The site's current low ecological value could be enhanced and the site linked into a network of green spaces for wildlife habitats and leisure uses;
- The visual appearance of the site could be significantly improved through sensitive development and landscaping which takes into account views of the site, particularly from the area of special landscape value.

9. A number of issues have been highlighted during consultation with key stakeholders and prospective occupiers. These issues are addressed in the Masterplan and include:
  - Provision of necessary transport infrastructure to ensure site is accessible - this is a key consideration in attracting potential investors, occupiers and visitors to the site;
  - Need to maximise shared use of facilities and parking provision - this would improve scheme viability and sustainability of uses and create a more active and vibrant destination;
  - Site operation and management - there would be a requirement to create income streams to secure the financing of key site functions.





## EVOLUTION OF THE MASTERPLAN

10. Preparation of the Masterplan has been guided by the following key strategic objectives:

- To capitalise on the strategic location and unique assets of the site and maximise regional benefits;
- To promote development of regional significance which would act as a catalyst for social and economic regeneration and achieve a step change in opportunities for the whole community;
- To accelerate and provide a physical expression of the on-going transformation from conflict to peace which builds on the heritage of the site and creates a neutral and welcoming venue which is accessible to all;
- To identify and promote lead projects which are creative and innovative and would act as a catalyst to unlock the potential of the site and to maintain all-party and community support;
- To strengthen the Regional Economy and tackle social disadvantage in accordance with the RDS;
- To achieve equality of opportunity and provide an inclusive shared resource (in accordance with Section 75 of the Northern Ireland Act and New Targeting Social Need (New TSN));
- To establish an integrated Development Plan and implementation strategy which is economically, technically and environmentally feasible and capable of delivery within an acceptable timescale;
- To promote best practice in sustainable development and minimise environmental impacts and as far as possible protect and enhance the existing bio-diversity of the site;
- To achieve value for money and minimise public subsidy within a framework of delivering the social and economic objectives of the cross-party Maze Consultation Panel and RDS;
- To be an example of good practice in terms of quality of

architecture and good design incorporating best practice in public art and to capture the significance of the site.

## MASTERPLAN SCENARIOS

11. The cross-party Maze Consultation Panel recommended the development of a Masterplan to include:

- A multi-sports stadium;
- An International Centre for Conflict Transformation based on the listed prison buildings and structures to be retained on the site;
- A Rural Excellence and Equestrian Zone including an International Exhibition Centre and showgrounds;
- Offices, hotel and leisure village;
- Employment Zone;
- Community Zone.

12. A number of alternative development scenarios were developed with the specific objective of allowing a robust assessment of alternative approaches to site development and delivery of the key components identified by the Consultation Panel Report and of identifying the most suitable combination of uses taking into account strategic objectives and economic, social and environmental sustainability criteria.

## PREFERRED MASTERPLAN SCENARIO

13. The outline financial appraisal demonstrated that there is an affordability gap under all scenarios and a requirement to review the overall mix and phasing of development to meet strategic objectives. In particular, the outline financial appraisal demonstrated how, subject to planning approval, the inclusion of an element of residential development would increase the value of the site and reduce the potential funding gap.
14. A Preferred Masterplan scenario was developed on the basis of this assessment which provides an appropriate framework for site development.

15. In particular, the Preferred Masterplan scenario:
- Works within planning policy parameters;
  - Creates a balanced mix of uses and activities on the site;
  - Maximises opportunities for synergy of uses and sharing of parking/ facilities;
  - Provides for phasing of development and infrastructure provision;
  - Reduces the affordability gap and improves scheme viability.

**THE VISION FOR THE MAZE/ LONG KESH**

16. The vision for the site is based on an overall commitment to sustainable development objectives - making land available to improve the quality of life and the environment; contributing to sustainable economic growth; protecting and enhancing the historic and natural environment; promoting public transport; ensuring high quality development through good design and ensuring that development supports existing communities and makes a lasting contribution to the prosperity of the whole community. The Maze/Long Kesh would become an active, dynamic and vibrant destination offering a comprehensive range of facilities and well integrated with its surroundings. The regeneration and transformation of the site would take place within a distinctive setting of attractive new buildings, quality public realm and new public spaces. It would become the focus of activity and opportunity - offering a rich diversity of uses throughout the year.

**MASTERPLAN OBJECTIVES**

17. The Masterplan establishes a robust planning policy framework and is underpinned by the following objectives:
- Promoting regeneration to improve the wellbeing of communities;
  - Promoting sustainable regional, sub-regional and local economic growth;
  - Promoting communities which are inclusive, healthy,

- safe and crime free whilst respecting the diverse needs of communities;
- Meeting expected needs for development taking into account accessibility and sustainable transport needs and the provision of essential infrastructure;
- Giving priority to ensuring access for all to jobs, health, education, shops, leisure and community facilities;
- Recognising the need to enhance and protect biodiversity and to offset adverse environmental effects;
- Promoting the more efficient use of land;
- Reducing the need to travel and encouraging public transport provision to secure more sustainable patterns of transport.

**MASTERPLAN PRINCIPLES**

18. At the heart of the Masterplan is a deep rooted emphasis on sustainable development and integrated design. Every aspect of life at the Maze/Long Kesh from the design of buildings and spaces, the careful integration of landscape and water, easy access to recreation and sports and to the listed prison buildings would embrace new thinking in terms of sustainable life styles and well being. The key principles underlying the Masterplan may be summarised as follows:

- The promotion of a high quality mixed use development which can be phased over time;
- The creation of an inclusive and accessible destination with public access to a diverse range of sporting and leisure facilities which would promote healthy living;
- The creation of an internationally known location for the promotion of peace building and conflict transformation at the listed prison buildings as part of the International Centre for Conflict Transformation.
- The integration of the development area with the wider environs through the provision of new infrastructure including transport links, pedestrian and cycle ways, amenities and new facilities to serve existing and new residents;

- The promotion of synergy between uses and sharing of facilities eg: parking, service areas, exhibition space, catering and other facilities;
- The creation of a strong focus of development which integrates public uses in an attractive high quality public realm with landscaping and public art;
- Reducing the impact of motor vehicles over the long-term development phases with a reduction in surface parking and good public transport services within and to the site;
- The promotion of sustainable development objectives including sustainable construction methods, sustainable urban drainage systems, enhancement of biodiversity and the use of renewable energy;
- A high quality landscape which integrates the site with the surroundings and the Lagan Valley and provides an attractive destination for visitors and residents

**MASTERPLAN COMPONENTS**

19. The development comprises:
- **A multi-sports stadium with a capacity for about 42,000 spectators which would be used for Gaelic sports, rugby and football in addition to open air concerts and other large events.**
    - It is also envisaged that the stadium would contain a hotel, conference facilities, and offices;
    - The stadium would provide for a range of community uses such as training space, medical access and an education/learning centre;
    - It is proposed that the stadium would be located on a podium with underground parking and service areas which would link the sports and leisure uses in a traffic free environment;
    - The Masterplan provides a significant opportunity for community sports activities to help fulfil the needs of young people and promote school and community use of facilities within the stadium and sports pitches;

- The Masterplan includes a strategy to meet the parking requirements associated with large stadium events which seeks to maximise the potential for shared and temporary parking and, over the long term, to promote the use of public transport.

- **An International Centre for Conflict Transformation where people can learn about managing and transcending conflict. The facility would be based on the existing listed prison buildings and structures.**

- It is intended that the International Centre for Conflict Transformation would play an important role in the transformation of the region in the period of post-conflict normalisation through promoting a shared society. With links to local universities, and organisations in other parts of the world that have undergone or are going through periods of similar transformation and change, such as the Balkans, Southern Africa and the Middle East, the International Centre for Conflict Transformation would provide a facility to support and facilitate the ongoing process of dialogue and building trust and confidence within and between communities and allow others to learn from the problems the community has experienced and how these are now being resolved. The International Centre for Conflict Transformation would be a new building of iconic status providing visitor and educational facilities. A living and dynamic place would attract people. It should be built close to but not necessarily inside the area housing the listed prison buildings;
- The Masterplan provides a parkland setting for the Centre and ensures that other uses would not impact on the functions of the centre or the historic significance of the listed prison buildings;
- It is also envisaged the International Centre for Conflict Transformation would house a visitors centre, an interpretative centre, conference facilities and offices. These facilities would provide a range of activities dealing

with conflict transformation processes with a special focus on the history of the peace process;

- The International Centre for Conflict Transformation would also provide a significant opportunity for people from abroad interested in learning about conflict resolution processes. The interpretative centre would provide facilities for visitors to appreciate the historical importance of the prison. It would also provide an inclusive opportunity for those involved in the conflict to tell their stories;
- The International Centre for Conflict Transformation would provide facilities for children and for those attending colleges and universities to learn about the history of the peace process;
- The re-use of the aircraft hangars within the International Centre for Conflict Transformation is proposed for the display of historic aircraft and associated exhibition space and interpretation facilities.

- **High quality employment space, promoted in association with Invest NI, with the potential for a range of business uses and the creation of up to 4000 jobs which would help to facilitate inward investment and encourage social enterprise.**

- The masterplan provides a range of employment/business space including larger scale light industrial and logistics operations adjacent to the motorway and a high tech business/ office area in a high quality setting. The site may offer particular potential for business development in sports related sectors. Additional employment opportunities would be created in the service sectors including the stadium and leisure.

- **A potential Rural Excellence and Innovation Zone to include an Exhibition Centre and associated showgrounds and equestrian centre.**

- Subject to further detailed discussions, the Masterplan provides the range of facilities required for the potential

relocation of the Royal Ulster Agricultural Society's Balmoral showgrounds with a modern exhibition facility which has the potential to be expanded over time to 16,000 sq m to provide a regional facility of international standard. The exhibition halls open onto the showgrounds to allow for integrated use and share catering and function space and parking and service areas (beneath the podium) with the stadium and arena;

- A rural excellence or sustainable living centre could be provided which could serve as a showcase for farming and sustainable activities such as biomass farming;
- Subject to detailed appraisal, the showgrounds could also allow for the provision of equestrian facilities which could be used as a permanent year round regional equestrian centre linked to Down Royal and the Lagan Valley by a series of trails.

- **A potential multi- purpose largely sports based arena with a capacity for around 3,000 spectators located within the sports zone adjacent to the stadium.**

- The arena would share catering and function space and parking and service areas with the exhibition halls and stadium.

- **Leisure and entertainment facilities grouped around the podium to create a focus of public activity and synergy of uses.**

- A range of uses can be accommodated in a series of multi-functional buildings linked by pedestrian routes including:
  - o cafes/restaurants
  - o specialist retail
  - o a potential multi-screen cinema
  - o skating rink.

- **A network of civic spaces which may be used for a variety of associated activities including:**
  - o specialist markets
  - o performance space (including the potential for a winter skating rink)
- **High quality new housing, to include integrated housing including social housing both of which would promote equality and inclusion objectives.**
  - Housing development would be phased in relation to planning policy with in the region of 200 units to be developed in the period up to 2015 as enabling development. Any prospect for longer term further housing development would be subject to Plan review and planning policy applying at the time;
  - Within the Masterplan vision, the creation of a sustainable residential community on the site would support community facilities and promote more sustainable and healthy lifestyles with access to employment and leisure. Subject to planning, a range of house types and sizes is proposed from apartments to family housing;
  - The residential development would be supported by community facilities such as children’s play areas, open space, medical facilities and local shops. The objective is to create a sense of community and unique living environment.
- **A Community Zone with open space and play areas for the existing community adjacent to the Coronation Estate on the Halftown Road.**
  - The local community would also have access to the new facilities on the Maze/ Long Kesh site including sports pitches and new community facilities;
  - The local community would also benefit from the closure of the Halftown Road to through traffic.

- **Parkland and landscaping to ensure the integration of the site with the surrounding landscape and links to the Lagan Valley and the creation of an attractive setting for the development and facilities for residents and visitors.**
  - Two principal public spaces are proposed- a central public plaza/precinct around the stadium, exhibition halls and leisure facilities and a large central park. The park would include an area of wetlands as part of a sustainable drainage system;
  - The landscape structure recreates key elements of the rural landscape with the creation of green corridors linking with the local landscape;
  - A central green spine is proposed along the route of the former runway as a focus for new development;
  - A network of public spaces and squares would be provided throughout the development;
  - Lisburn City Council are exploring the potential connection of the Lagan Navigation to the site, subject to an appropriate business case. There is potential for this to be accommodated within the Masterplan;
  - the use of public art to add to the distinctiveness and identity of the site.
- **New highway, public transport and services infrastructure provision including:**
  - a new motorway junction, primary road link to the M1 and the upgrading of Blaris Road to provide access to the site;
  - Public transport provision including:
    - o the potential for a rail link to Lisburn and Belfast
    - o park and ride facilities
    - o new bus links.
    - o an extensive network of pedestrian and cycle links within the site and with the surrounding area and Lagan Valley.



- Parking to serve the needs of the development with an emphasis on shared use wherever practicable;
- provision of a new water main, an on-site closed waste water treatment plant (with the potential for expansion by Water Service to serve the needs of the wider area);
- a new electricity sub-station.

- **Potential for the promotion of sustainable development objectives including:**

- use of renewable energy sources;
- a Sustainable Living Centre that covers lifestyles, food production and transparency about how the site was designed and is managed, building on its heritage through interpretation facilities;
- sustainable drainage systems including the provision for storm water retention ponds within the landscaped areas.

### PHASING

20. Development would be phased. The stadium and International Centre for Conflict Transformation would be developed as part of the first phase which is also likely to include some employment development, and elements of transport infrastructure (to 2012). An element of residential development (200 units) would be promoted in Phase 1 as a form of enabling development to deliver the regionally significant projects. There could be potential for later phases of residential development within the reserve areas on the western and northern parts of the site subject to Plan review. The Masterplan would be reviewed over time in the context of a future review of planning policy and changing market opportunities.
21. The early phases of development would be focused around the stadium and International Centre for Conflict Transformation. The emphasis would be on creating a compact and high quality development with necessary

infrastructure and service provision and landscaping. The Masterplan seeks to phase infrastructure provision. However, there would be a requirement for significant new infrastructure provision to support the first phase of development, notably:

- Provision of the motorway junction and upgrading of the Blaris Road and construction of the Knockmore Link to provide access to the site;
- Site services including construction of the waste water treatment plant and new sub station;
- Public transport infrastructure;
- Landscaping and sustainable drainage system.

### TRANSPORT STRATEGY

22. Discussions regarding the proposed transport infrastructure for the site have taken place with the Roads Service, the Ports and Public Transport Division of the Department for Regional Development, and with Translink.
23. The overall approach to transportation has been to aim for a realistic sustainable strategy over the long term that encourages alternative non-car modes of transport wherever possible. It is recognised that the proposed development would generate significant volumes of traffic, regardless of the transport strategy developed, and that this traffic would need to be accommodated. The Transport Strategy therefore aims to minimise highway infrastructure whilst ensuring that the transport impacts of the development can be accommodated without adverse effect on the strategic road network. From a social inclusion point of view, it will be important to ensure that the site is accessible for work and other uses by people in nearby areas of deprivation.
24. It is recommended that the following specific infrastructure is provided to support Phase 1 of the Maze/ Lond Kesh development albeit that this would be subject to

confirmation by a detailed Transport Assessment:

- New M1 motorway junction and access road;
- Local widening of the M1;
- Upgrading of Blaris Road to dual carriageway standard;
- Provision of the Kockmore Link (this is also required to support other proposed development in the BMAP at Blaris);
- Rail Link to the site.

25. Other elements of alternative infrastructure would also be required to reduce dependence on the car and should include bus priority and upgrade measures to enhance services from Belfast and to serve park and ride sites. All of the above should then be supported by initiatives to encourage higher car occupancy and increase the level of “modal switch” to public transport.
26. A detailed transport assessment would be required to confirm the requirement for any infrastructure works. Other strategic highway schemes in the area such as the widening of the M1 from Junction 7 to Blacks Road are generally recognised as schemes that are required for the relief of existing congestion and to deliver benefits to the entire region to the south of Belfast. Hence, whilst it is important that they are undertaken and it is recognised that they facilitate access from Belfast to the Maze/ Long Kesh, it should be possible for the initial phase of the proposed development at the site to occur without them, provided high quality public transport alternatives are provided.

### SUSTAINABILITY STRATEGY

27. The development of the Maze/ Long Kesh seeks to meet a number of defined sustainability principles based on national, regional and local policy and guidance through appropriate design solutions. Other principles relating to the construction and management phases of the development include the implementation of a comprehensive waste management

strategy, productive reuse of the listed prison buildings and scheduled WWII structures and initiatives such as car clubs and car sharing to reduce car use. To meet the sustainability objectives, a range of practical measures have been identified:

- Full remediation using appropriate best practice techniques;
- Maximise the efficiency of land-use and shared uses for outside space and buildings;
- Achieve BREEAM Excellent throughout the development- this would necessitate energy efficiency, on-site renewable energy, water efficiency and sustainable drainage systems;
- Walkable and cyclable neighbourhoods and public transport provision;
- Use of low environmental impact materials;
- A long term target of 50% of heat and power requirements from renewable energy;
- Control of car parking and promotion of public transport;
- Provision of a range of employment and training opportunities;
- A landscape that encourages users to be active and access the countryside and enhancement of bio-diversity;
- Participation and inclusion of the community in planning, design and management.

**ENERGY STRATEGY**

28. A sustainable approach to energy has been adopted which involve:
  - Using renewable energy; and
  - Using energy efficiently.
29. There is a real opportunity at this site to implement renewable energy technologies and to promote best practice in sustainable development. The size of the site and its strategic location provide opportunities for harnessing natural resources such as wind power, and groundwater for heating and cooling buildings, and biomass production for

CHP. It is recommended that an energy strategy is adopted for the site which, subject to economic viability, establishes a commitment to provide a combination of renewable energy from wind, solar, and GSHP and to improve energy efficiency through for example the use of CHP powered by biofuels. This would be supported by biomass production on the Maze site and in the wider area surrounding the site. The siting of large scale wind turbines at the site could also form part of a landmark gateway feature for the site.

30. The implementation of the overall sustainability strategy and energy strategy would contribute to the delivery of Government policy for renewable energy and sustainable development in NI.

**REGENERATION BENEFITS**

31. Given the scale of development envisaged, the development proposals would clearly deliver a wide range of local, sub-regional and regional regeneration benefits. The opportunity also exists to take forward aspirations to foster equality, respect and social harmony.. The uses proposed would support cross community integration and positively promote the objectives of inclusion, equality and tolerance and respect. Key benefits would include the potential for:
  - Economic opportunity and diversification - benefits for local businesses and residents;
  - Social inclusion and equality of opportunity- promotion of a range of uses for all sectors of the community and integration through sports, culture, leisure and heritage, and new employment and housing opportunities including integrated and social housing;
  - The promotion of enterprise and innovation - the attraction of new high value-added businesses into the area, together with a skilled young, aspirational workforce into a new high quality living and working environment;
  - Supporting wider regeneration policy objectives

- diversification of the economic base, connecting residents to emerging economic opportunities, increasing accessibility to these opportunities to disadvantaged groups in deprived urban communities creating a new enterprise culture and a general improvement to the profile of the region;

- The attraction of inward investment - a modern, vibrant and successful location to invest in;
- Stimulating tourism – the opportunity to attract a greater number of tourists to both the local area and the wider region, stimulating additional spend across the area and enhancing the wider tourism industry across the region;
- Improving the physical environment and overall quality of life - emphasis upon high quality urban design and place-making to ensure that physical development across the site comes forward within an attractive, co-ordinated and well considered design;
- Providing new facilities and connecting with communities - The new facilities would be of direct benefit to the existing population. Integration of the new development with surrounding existing communities would be crucial to ensure full access to the new opportunities and facilities;
- Delivering strategic environmental improvements- a catalyst to deliver environmental improvements throughout the wider area, in particular enhancing existing environmental assets such as an environmental corridor from the River Lagan through to Hillsborough;
- Sustainable development- the promotion of energy efficiency and the use of renewable energy sources;
- Delivering strategic transport improvements- Significant investment in new road and public transport network including new road & public transport connections which could enhance accessibility for business and residential communities across both the sub-regional area and along the Belfast-Dublin corridor.

## IMPLEMENTATION AND DELIVERY

32. The Masterplan incorporates a comprehensive package of projects which could be delivered over the next 5 – 15 years. It would provide the basis for the coordination of future development proposals and investment.
33. A number of principles underpin the delivery of the Masterplan:
- The importance of a comprehensive approach whilst allowing development proposals to come forward on a phased basis;
  - The promotion of sustainable and innovative building technologies;
  - The need to stimulate private sector investor confidence;
  - The provision of new infrastructure would be fundamental to achieving the strategic objectives for regeneration of the site;
  - Development and public realm proposals must be of the highest design quality;
  - Future management and maintenance of facilities and the public realm must be secured.

## PROJECT COSTS AND AFFORDABILITY

34. A financial analysis has been undertaken which addresses the following issues:
- Minimising costs to the public purse;
  - Maximising private sector leverage;
  - Maximising the development value of the entire site.
35. Costs and values provided within this report are high level and provide an indication of the likely order of costs for construction elements within the scheme and the potential scale of the affordability gap. The proposed development shown in the Masterplan would give rise to a funding gap which would need to be met by public sector investment. If affordability

constraints were to become an issue going forward, certain elements of the project would have to be re-assessed. The overall project cost is therefore not fixed and sensitivity analysis has been undertaken on a number of variables in order to consider the possible impact on affordability. Indeed, the costings provided are indicative only and provide no more than a tentative estimate in purely outline terms, and are all subject to more detailed consideration and elaboration.

36. The affordability gap could potentially be reduced by a number of measures including leveraging private investment, increasing land values and land receipts or a reduction in the capital costs, for example the omission of the requirement for additional decked parking to serve the stadium subject to the successful delivery of the transport strategy and public transport provision. This would be subject to planning policy and necessary planning approvals.
37. The ability to construct residential units on the site in the period up to 2015 would be required as enabling development and would be fundamental to the viability of the scheme. Any future significant residential development would be dependent on planning policy review.

## DELIVERY MECHANISMS

38. The regeneration of the Maze/Long Kesh site would be a complex undertaking. The risks would need to be appropriately managed and the scheme would be completed over a number of years. The public sector would have a crucial initial role to play in facilitating development but the long-term success of the scheme would ultimately depend on the ability to attract private sector investment and development skills. Therefore a partnership approach between the public and private sectors would be fundamental to successfully delivering the various objectives of the stakeholders.
39. There are a range of potential delivery mechanisms including joint ventures, appointment of a single developer and

forming a development company. None of these are mutually exclusive and in practice more than one may form part of the final delivery model. This spectrum of intervention ranges from a pure public sector model which would deliver all of the services required. At the other end, a private sector body could be contracted to undertake these activities. In assessing the approach, the following criteria are of importance:

- Ensures delivery of the governments strategic objectives;
  - Manages and if appropriate transfers, the risk from the public sector to the private sector;
  - Ensures that the private sector is effectively incentivised to deliver Value For Money for the public sector;
  - Ensures that there is sufficient control and influence by the public sector to ensure that non-delivery can be addressed;
  - Ensures that the comprehensive development of the site is brought forward and that elements of the project are not 'cherry picked' by the private sector;
  - Ensures that the vehicle has the capability and capacity to deliver the project.
40. As part of the next stage of development of the project, a detailed review and analysis would be undertaken on behalf of Government Departments to determine the most appropriate delivery mechanism for the scheme, particularly in relation to maximising private sector investment and delivery partnership.

## FUNDING

41. A mix of private and public sector funding for this scheme is highly likely. Given the wide range of social and public policy objectives, a purely private sector funding solution is unlikely to represent value for money, whilst equally, there are purely commercial elements of the project which should not require public sector funding at all. The appropriateness of private sector funding for elements of the scheme has been assessed. Subject to future Plan review, 'residential' and 'commercial' components of the development could be taken forward under private finance.

**PLANNING ISSUES AND STRATEGY**

- 42. The planning strategy for the development of the Maze/ Long Kesh site and other planning-related issues addressed in this report have been informed by a number of helpful discussions with the Planning Service. These discussions were conducted wholly without prejudice to the Planning Service’s formal position on the issues, given its regulatory role currently and in due course.
- 43. The proposed Planning Strategy involves:
  - Preparation of the overall Masterplan to provide context for planning applications for individual projects to be considered;
  - An application for outline planning permission for the Maze/Long Kesh site. This will establish authority for the totality of the project under a process that will assess the full impacts of this project of regional significance and demonstrate how the regeneration objectives for the site as a whole are to be achieved;
  - An application for full planning permission for the Stadium and all external road works;
  - Separate planning applications for other development projects.
- 44. It is considered that if the planning applications are presented in this way, the proposed development would be deemed to be in accordance with current planning policy and would not conflict with the BMAP process.

**PROGRAMME**

- 45. The London 2012 Olympics and Paralympic Games provide the opportunity to participate in these events subject to completion of the stadium by Summer 2011. The possibility of the new Stadium hosting a small number of preliminary matches as part of the Olympic Football Tournament is under active consideration. Whilst this is not critical to the proposed development, it provides a significant opportunity and a

catalyst for regeneration which would be lost if construction were to be delayed. An outline programme has therefore been prepared to show how construction of the stadium, the International Centre for Conflict Transformation and associated off-site infrastructure could be completed within this period. Whilst this presents a challenging programme, it is considered that it is achievable if early decisions are taken to advance the next stage of technical, planning and design work and appropriate long term management and delivery arrangements are firmly established.

- 46. If the project is to move forward, it would be necessary to commence work on a number of key tasks in Summer 2006 with the objective of moving towards the submission of planning applications by mid/end 2007. This would assist in the development of a detailed Business Case which would assist the decision making process. In meeting the requirements of the programme, there would be a requirement for an overall project management system that ensures that key programme milestones are met. In addition, it would be necessary to work closely with relevant Government Departments and statutory service providers to ensure that project milestones can be delivered.

**CONCLUSIONS**

- 47. Regeneration of the Maze/Long Kesh site offers the potential to bring significant long term social and economic benefits to the whole community through a mix of development which reflects the strategic importance of the site and its role in the region. The overriding objective is to provide an internationally recognisable physical expression of the ongoing transformation from conflict to peace and to provide an inclusive, shared resource for the people of the region and beyond, reflecting the broad range of aspirations expressed during the work undertaken by the cross-party Maze Consultation Panel.
- 48. The Masterplan demonstrates how the development of the Maze/Long Kesh could meet these objectives through

the promotion of a mixed use development of regional significance which would create a unique destination.

- 49. Existing site conditions gives rise to significant requirements for new road and service infrastructure to accommodate the needs and potential impacts of the proposed development. This would have implications for development costs which have been assessed in the financial analysis. Given the estimated level of development costs and anticipated land values in the context of current planning policy, the proposed development would result in an affordability gap. The objective must be to reduce the affordability gap as the project moves forward by maximising private sector leverage and the development value of the entire site over the longer term and where possible reducing or phasing development costs and risks.
- 50. It is recommended that the project moves to the next stage of detailed technical studies, market testing and design which would inform the development of the detailed business case and the preparation of planning applications. This would require the implementation of a comprehensive project management system, commitment to an agreed programme and milestones, the appointment of necessary technical advisors and consultants and close cooperation between key Government Departments and stakeholders.
- 51. The project offers the potential to participate in the London 2012 Olympics and Paralympic Games via the preliminary stages of the Football Tournament but this would be dependent on progressing scheme development and securing necessary approvals within a tightly defined timescale.
- 52. The potential benefits of the development of the Maze/ Long Kesh site are significant and it is recommended that every effort should be made to develop a economically and environmentally viable and high quality scheme which would allow this challenge to be met.



# INTRODUCTION

- 1.1 This report sets out a Masterplan and Implementaion Strategy for the development of the Maze/Long Kesh site. It provides a fully integrated site Masterplan that takes into account the recommendations of the cross-party Maze Consultation Panel, key individual project requirements and site-wide transport and utilities infrastructure needs. The Masterplan places particular emphasis on delivery and implementation.
- 1.2 The report and its recommendations are purely advisory and convey no intention on the part of government to accept all or part of the outline plan envisaged in this document. Rather the report presents a set of proposals for consideration by government, subject to all due diligence and the application of statutory processes should it wish to pursue the regeneration of the site on this basis. The proposals and recommendations set out in the report are the responsibility of the masterplanning consortium and do not purport to represent in any way the views of individual government departments or the government. The costings are indicative only and are all subject to more detailed appraisal. The publication of this report does not bind any government body to any financial undertaking or commitment.

## BACKGROUND

- 1.3 The development of the Maze/Long Kesh former prison and security site is being promoted under the Reinvestment and Reform Initiative (RRI) which was announced in May 2002 and deals with the transfer of some former military bases and security sites to the local administration. Providing a major step in normalisation, this transfer emphasised the government's strong belief that the sites which once symbolised the period of conflict can now become significant engines for economic and social regeneration in local areas. The Office of the First Minister and Deputy First Minister (OFMDFM) has the power to hold, manage, develop and dispose of the assets transferred under the RRI with the objective to develop such sites for regeneration.

- 1.4 Within the RRI, the Maze/Long Kesh is uniquely significant. It is the largest publicly owned regeneration site in the region comprising almost 5% of the total available publicly owned regeneration land and is of historical significance. In view of its unique significance, the Government has adopted an approach in regeneration that intends making the site a beacon for the RRI and a key physical expression of the transformation from conflict to peace.

## MAZE CONSULTATION PANEL

- 1.5 In order to promote this objective, the Government set up a cross party Maze Consultation Panel to undertake a widespread consultation about the vision for the site and the Panel published its report 'A new future for the Maze/Long Kesh' in February 2005. The Panel's report recommends a number of key components for transformation and regeneration and has provided the basis for preparation of the Masterplan for the site.
- 1.6 The Maze Consultation Panel concluded that the regeneration of the Maze/Long Kesh site offers the potential to bring significant long term social and economic benefits to the whole community through a mix of development which reflects the strategic importance of the site and its role in the region. The Panel recommended that the Government bring forward innovative and sustainable development proposals and drive forward social and economic regeneration. For the Panel, the overriding objective is to provide an internationally recognisable physical expression of the ongoing transformation from conflict to peace and to provide an inclusive, shared resource reflecting the broad range of aspirations expressed during the work undertaken by the Maze Consultation Panel.
- 1.7 The Maze Consultation Panel Report highlights the potential of the site to accommodate a range of uses due principally to its strategic location, size, heritage importance and its designation in the draft Belfast Metropolitan Area Plan (BMAP) as a strategic land reserve of regional importance.

- 1.8 The Masterplan builds on the recommendations of the Panel's Report to produce an integrated development plan for the site which has the potential to be economically and environmentally feasible and deliver best Value for Money (VFM).

## PLANNING CONTEXT

- 1.9 The Masterplan is informed by current planning policy and relevant Planning Policy Statements. The site is currently designated as Green Belt and BMAP designates it as a 'strategic land reserve of regional importance' in order to safeguard the site from development which would undermine its strategic potential. The Masterplan also reflects the aims of New Targeting Social Need (New TSN) particularly when taking account of the potential benefits accruing to the wider South/West Lisburn region. New TSN is one of the Government's key socio-economic commitments aimed at combating problems of unemployment, increasing employability and addressing the causes of social exclusion.

## SOCIAL, ECONOMIC & COMMUNITY AIMS

- 1.10 The policy context has a strong thrust towards revitalising the economic base, addressing social exclusion and building on the strategic importance of the site to benefit the local and wider community. Clearly within this, connectivity with both Lisburn and Belfast and identifying the long term economic and 'place' role of the Maze/Long Kesh site are vital in establishing a long term and sustainable Regeneration Framework to guide future development.

## SUSTAINABILITY

- 1.11 The site presents an opportunity for a sustainable approach to development and for the promotion of an appropriate mix of uses. Development of the site would be required to respect the natural environment and historic character of the site. The challenge would be to ensure a comprehensive plan for structuring the development of the site.

## DEVELOPMENT OF THE MASTERPLAN

### Approach

1.12 A multi-disciplinary consultant team led by Mott Macdonald and EDAW was appointed in May 2005 to prepare a comprehensive Masterplan for the former Maze/Long Kesh security site. The preparation of the Masterplan has comprised three stages of work:

- Stage 1: Baseline Review and Preliminary Concept. This stage comprised an examination of existing conditions including planning policies; transport and accessibility; infrastructure capacity; urban design; landscape analysis and characterisation; environmental characteristics; current development proposals; other regeneration initiatives and market trends and opportunities. This involved consultation with key stakeholders, the identification of development principles, consideration of possible alternative scenarios and the definition of sustainability objectives. Baseline data was reviewed in order to develop an in-depth understanding of the key issues to be taken into account in the preparation of the Masterplan.
- Stage 2: Option Development and Appraisal. This stage comprised the evaluation of Masterplan scenarios including transport and environmental assessment and the identification of a preferred Masterplan scenario. This work has involved the assessment of four scenarios against a set of agreed strategic objectives and technical assessment criteria and consultation with the client group and key stakeholders. Building on the baseline work undertaken and the technical assessment of Masterplan scenarios, recommendations were made on the approach to development and infrastructure provision which would best satisfy the aspirations of the Maze Consultation Panel and other strategic policy

objectives, is economically and environmentally feasible and delivers best value for money and regeneration objectives. The outcome of Stage 2 was a recommended framework for preparation of the detailed Masterplan and Implementation Strategy.

- Stage 3: Preparation of Masterplan and Implementation Strategy (this document). This stage of work has developed the preferred Masterplan scenario into a final Masterplan and Implementation Strategy including infrastructure cost plan, phasing programme, risk analysis and investment appraisal. The Masterplan and potential Implementation Strategy are set out in this report.

### A Long Term Plan for the Maze/ Long Kesh

1.13 The purpose of the Masterplan is to provide a recommended long term integrated development plan for the whole site which would be economically and environmentally feasible and provide the basic tools for the promotion, implementation and phasing of development. When implemented, the Masterplan should be capable of meeting the government's wide ranging Reinvestment and Reform Initiative (RRI) objectives, delivered in a sustainable way and maximising value for money.

1.14 The Masterplan seeks to:

- Bring forward innovative and sustainable development proposals to meet social and economic regeneration and equality objectives;
- Link individual projects and sites through the provision of necessary infrastructure and strategic landscaping and high quality public realm;
- Prepare a creative and deliverable Masterplan with genuine capacity to develop and regenerate the Maze/ Long Kesh site and enable the long term aspirations for the area to be secured.

### Key Considerations

1.15 In taking this work forward, particular importance has been placed on:

- Establishing the role and function of the Maze/Long Kesh site within the wider area;
- The development of a coherent strategy which integrates existing elements of the study area and current development projects;
- Understanding the capacity of the area in terms of development potential and infrastructure;
- Protecting the environment and promoting sustainable development;
- Promoting quality in built form, urban design and importance of the public realm;
- Integration of the development with surrounding communities;
- Delivery and implementation.

1.16 However, a number of key issues are also raised which have been addressed in the consideration of Masterplan options, notably:

- The environmental and economic viability of the proposed development;
- Infrastructure requirements and phasing and cost implications;
- Development costs and scheme viability;
- Public transport accessibility and service provision;
- Site preparation and the extent of remediation works required;
- Development quantum and mix taking into account current planning policy;
- The potential to promote sustainable development objectives.

**FORMAT OF REPORT**

1.17 The report is divided into the following sections:

- Section 2 - Key Issues
- Section 3 - Evolution of the Preferred Masterplan Scenario
- Section 4 - Details of the Masterplan
- Section 5 - Transport Strategy
- Section 6 - Sustainability Strategy
- Section 7 - Regeneration Benefits
- Section 8 - Implementation and Delivery
- Section 9- Conclusions



Figure 1.1 Regional Location Plan



# KEY ISSUES

2.1 In preparing the recommended Masterplan for the Maze/ Long Kesh site, a full assessment has been undertaken of existing conditions to identify development constraints and opportunities. This has involved consultation with key stakeholders, the identification of development principles, consideration of possible alternative scenarios and the definition of sustainability objectives. This in turn has allowed an in depth understanding of the key issues which have informed the preparation of the Masterplan.

2.2 A number of key issues have influenced the development of the Masterplan and assessment of development options. These are summarised below.

## PLANNING

2.3 The planning policy context is provided by the following documents:

- The Regional Development Strategy for Northern Ireland (RDS)
- The Belfast Metropolitan Area Plan (BMAP)

## THE REGIONAL DEVELOPMENT STRATEGY FOR NORTHERN IRELAND (RDS)

2.4 Advice has been provided by the Department for Regional Development on the future development of the Maze/Long Kesh site.

2.5 The Regional Development Strategy (RDS) offers a strategic and long term perspective on future development up to the year 2025. It sets out a vision, guiding principles and strategic planning guidelines which are relevant to the development of the site. It includes strategic planning guideline to promote a balanced spread of economic development opportunities across the Region (SPG ECON 1.4). Within this policy guidance, reference is also made to the need for flexibility to accommodate major economic development of a regional or sub-regional significance.

2.6 The RDS contains a spatial development strategy designed to achieve more sustainable patterns of development. Strategic policy guidance is directed towards promoting towns and cities as the focus for housing, employment, commercial development and cultural and service facilities. However, at the same time it provides flexibility for the accommodation of 'unforeseen imaginative proposals for economic development that are in the public interest and of significance to the whole or a substantial part of Northern Ireland'. The intention set out in the RDS is to facilitate development projects which would enhance the external competitive advantage of the region. The RDS also promotes better community relations, recognising cultural diversity and reducing socio-economic differentials through the development of major employment/ enterprise areas in locations which are accessible to all sections of the community.

2.7 While the RDS does not at present refer specifically to the Maze/Long Kesh site, it can be considered to be a site of regional significance by virtue of its designation in the Draft Belfast Metropolitan Area Plan (BMAP) (November 2004) as a 'Strategic Land Reserve of Regional Importance'. The Draft BMAP has received a Certificate from the Department of Regional Development that it is in general conformity with the RDS. The designation in the Draft BMAP means that the site is to be safeguarded from any development, which would prejudice its potential as a reserve for major development of regional significance.

2.8 The RDS sets out policy guidance for a range of land uses and also provides guidance for the Belfast Metropolitan Area (RDS Chapter 6). This guidance has been used in the preparation of the Draft Belfast Metropolitan Area Plan. It follows, therefore, that proposals for the Maze/Long Kesh have regional significance. This should be in tune with the objectives of the spatial development strategy. However, whilst this promotes existing urban areas as locations for employment and housing development, uses that enable

a major economic development package of regional significance to come forward may be acceptable. The acceptability of significant housing can only be judged in the longer-term after the major review of the RDS in 2010.

2.9 All Government Departments are required to have regard to the RDS in exercising any development function. The current Review (Focussed Assessment) of the RDS offers an opportunity to adjust the RDS following public consultation. This exercise is expected to be completed by mid 2006. The RDS specifies housing growth figures for the Belfast Metropolitan Area which have been allocated in the Draft Belfast Metropolitan Area Plan (BMAP). The allocation does not include the Maze/Long Kesh site. However, whilst current spatial policy does not promote new housing developments outside existing towns, the RDS provides for consideration of proposals in exceptional circumstances. In such circumstances, the balance of uses and the contribution that the development would make to regional development and the overall objectives of the RDS would be important factors. A major theme in the RDS is the promotion of sustainable patterns of development and the sensible and sensitive use of the built heritage and rural environment. Development at the Maze/Long Kesh would be expected to contribute to more sustainable patterns of development and movement through support for the role of public transport, walking and cycling and sustaining and enhancing biodiversity across the site.

2.10 A Public Examination into the review of the RDS housing figures was held in February 2006 to consider proposals to increase the assessment of need for additional housing up to 2015 by 25%.

## THE BELFAST METROPOLITAN AREA PLAN (BMAP)

2.11 The Lisburn Area Plan 2001 is the current development plan covering the site. The site is shown as being located

outside the development limit for the City of Lisburn and is zoned as Green Belt.. The proposed BMAP policy for the site which designates the site as a 'Strategic Land Reserve of Regional Importance' would override Green Belt policy. The outcome of the review into the Housing Growth Indicators for the Belfast Metropolitan Area would need to be considered further, especially with reference to the review of the RDS.

2.12 The planning issues raised by the future development of the Maze/Long Kesh site may be summarised as follows:

- Development proposals would be assessed in terms of the development plans, planning policies and guidance and other material considerations. The views of Lisburn City Council and the general public would be considered as part of the planning assessment of each planning application;
- Transportation issues and infrastructure provision are an integral part of the planning assessment. Development must be in accordance with key urban design principles and government's commitment to achieving excellence in construction;
- Planning applications are likely to be accompanied by an Environmental Statement (ES) which deals with the likely significant environmental effects of the proposal.

2.13 Proposals for the development of the site should be confined to those that can clearly be classified under the 'Regional Significance' criteria of the draft BMAP designation. Only facilitating/enabling land uses, or those clearly ancillary to proposals of the appropriate regional scale might be viewed as exceptional to this. Some housing development, say in the region of 200 units within the current BMAP period to 2015, may be acceptable as enabling development but any significant housing development might only be acceptable in the longer term depending on the outcome of a formal review of the housing indicators in the RDS and a mid-term review of BMAP.

## **SOCIO-ECONOMICS**

2.14 The RDS seeks to reduce socio-economic differentials through the development of major employment/ enterprise areas in locations which are accessible to all sections of the community. Whilst the baseline review has revealed that the immediate local area surrounding the site has relatively few socio-economic problems, there are some instances of deprivation and more severe problems do exist in certain communities across South Lisburn and in the corridor between Lisburn and Belfast. Areas to the south of the railway tend to display particular problems, with areas like Old Warren and Hillhall being ranked in the top 10% deprived in terms of education, skills and training. Particular problems lie to the north east of Lisburn running up through the M1 corridor north east towards Belfast, with communities in Lisburn such as Collin Glen, Poleglass, Kilwee and Twinbrook all being within the 10% most deprived, and adjoining communities over to the south and west of Belfast City Centre such as Whiterock, Glen Road, Woodvale, Crumlin and Falls all displaying significant problems.

2.15 Development of the Maze/ Long Kesh should include measures to provide access to opportunities on the site for nearby deprived urban communities.

2.16 The site is accessible to most population centres in the region and the Irish East Coast Corridor where it is estimated that around 3 million people live. The Maze/Long Kesh site lies in this corridor at a point where many transportation routes converge and there is the potential to link development with other regeneration programmes such as targeted training and employment initiatives. However, despite some concentrations of deprivation across South Lisburn and in the corridor between Lisburn and Belfast,, the relatively limited extent of socio-economic disadvantage at a local level means that region wide regeneration programmes are likely to be targeted elsewhere.

2.17 In terms of the wider regional economy, the key challenge is to grow the private sector and to reduce over dependence on the public sector. The economy is over-reliant on the public sector as a source of investment and employment. The RDS promotes the potential of the East Coast Corridor to accelerate the growth of the manufacturing and services sector thus increasing the prosperity of the whole of Ireland. The RDS also acknowledges that the exploitation of the economic development potential at selected locations on the key transport corridors is important. Manufacturing would continue to play a key role in the local economy in the future. However, in the face of increasing international low-cost competition, firms across the region would need to move up the value-added chain. The potential to enhance entrepreneurship, and provide a climate to foster research and development, business start up and follow on space should also be considered.

2.18 Invest NI is generally supportive of the promotion of economic growth through the development of the Maze/ Long Kesh site and is happy to engage in further discussion particularly in terms of marketing opportunities to its client base including potential inward investors.

2.19 Invest NI advise that recent years have seen a marked change in the nature of foreign direct investment (FDI) and that Northern Ireland's ability to attract new FDI for the manufacturing sectors is limited due to the continued emergence of the Far East and Eastern Europe with their emphasis on competitiveness. The region's business proposition is now more in line with opportunities from the services and software sectors. In these sectors, location decision makers are increasingly seeking business solutions within larger conurbations where there is a guaranteed large number of well qualified people and an extensive physical and business infrastructure demonstrating ease of access. Invest NI advise that investors from the financial services sector are increasingly only including regional cities with an existing cluster of similar businesses on location shortlists.



## EQUALITY AND INCLUSIVENESS

2.24 The Government's vision for the future of the region is for a peaceful, inclusive, prosperous, stable and fair society firmly founded on the achievement of reconciliation, tolerance and mutual trust and the protection and vindication of human rights for all. It would be founded on partnership, equality and mutual respect as a basis of good relations. "A Shared Future: Policy and Strategic Framework for Good Relations in Northern Ireland" sets out what is required to establish over time 'a shared society defined by a culture of tolerance: a normal, civic society in which all individuals are considered as equals, where differences are resolved through dialogue in the public sphere and where all people are treated impartially. A society where there is equity, respect for diversity and a recognition of our interdependence'. The following policy objectives have been identified:

- Eliminate sectarianism, racism and all forms of prejudice to enable people to live and work without fear of intimidation;
- Reduce tension and conflict at interface areas;
- Facilitate the development of a shared community where people wish to learn, live, work and play together;
- Promote civic-mindedness via citizenship education;
- Protect members of minorities (whether for example by religion, race or any other grounds) and mixed marriages from intimidation;
- Ensure all public services are delivered impartially and guided by economy, efficiency and effectiveness;
- Shape policies, practices and institutions to enable trust and good relations to grow;
- Encourage understanding of the complexity of history;
- Support cultural projects which highlight the complexity and overlapping nature of identities and their wider global connections;

- Support and learn from organisations working across ethnic divides for reconciliation;
- Ensure voice is given to the diverse victims of violence including via archives and victim-centred reconciliation events;
- Encourage communication, tolerance and trust but particularly in areas where communities are living apart;
- Promote dialogue between and mutual understanding of different faiths and cultural backgrounds, guided by overarching human rights norms.

2.25 A key challenge would be to build strong cohesive communities. Disadvantaged and segregated communities are less likely to benefit from improved public services and a growing economy.

2.26 It would be necessary to consider the equality impacts of the development of the Maze/Long Kesh site in relation to the Northern Ireland Act 1998 Section 75(2) equality categories to ensure that development promotes equality of opportunity and good relations in accordance with government policy objectives.

## TRANSPORT

2.27 The site is strategically located in relation to the highway network. However, in spite of its good strategic location, highway access to and from the site is currently very poor. Similarly, the site has currently very limited public transport connections by bus and rail (the site is approximately three miles from the nearest rail station).

2.28 It is understood that the strategic highway network may be operating beyond capacity by the end of the Belfast Metropolitan Transport Plan period in 2015. This does not take into account the potential impacts of development of the Maze/Long Kesh site. Any proposal for development of the site would therefore have to be accompanied by a robust

and credible Transport Assessment that analyses the potential impacts of the development and identifies infrastructure improvements required to mitigate these impacts.

2.29 Due to the existing access constraints, the development of the Maze/Long Kesh site would also require the provision of significant public transport provision and associated infrastructure.

## ENVIRONMENT

2.30 By taking an integrated approach to the environment, there are opportunities to obtain a best practicable environmental option (BPEO) for the site, while also achieving social and economic targets.

2.31 Care would need to be taken in terms of the remediation of the identified contaminated land hot spots and the implications that the various end uses may have on remediation approaches.

2.32 Small areas of valuable semi-natural broadleaved woodland and associated hedges have been identified at the southern boundaries of the site.

2.33 The noise and air quality issues associated with the proposed road transport access to the site are significant, with a requirement to minimise impacts on identified receptors. A key aim would be to minimise emissions of carbon dioxide with the aim of reducing any contribution to wider climate change.

2.34 Whilst no significant constraints have been identified, further assessment work is recommended to investigate issues related to surface and ground water quality, flood risk and the flood plain of the River Lagan.

## LANDSCAPE

2.35 The historic land use of the site has meant that the site is poorly integrated into the local landscape.

- 2.36 The existing site is dominated by the structures and buildings associated with its previous use as a prison and security site and airfield. The site shows limited relationship with the typical landscape character of the area, and is generally of poor landscape quality. Small areas of existing vegetation have landscape merit and are worthy of retention.
- 2.37 Long distance views to the site are available from elevated land to the north and south of the site. New development is likely to have a greater visual impact than the current land uses. Medium distance views are available from the south of the site, where the features associated with the recent land use are highly visible. Any future development is likely to continue to be highly visible from the south. Close distance views are available from the adjacent road network and residential properties.
- 2.38 Arguably, the site does not at present contribute positively to the visual amenity of the area. Future development of the site creates the opportunity to enhance the visual amenity of the wider area.
- 2.39 The site is ideally located to link into the developing leisure corridor extending along the Lagan Valley. Development proposals should also seek to create physical links to the key leisure locations in the immediate vicinity, namely the Lagan River, the Down Royal Racecourse and Golf Course and Cycle Route 9.
- 2.40 Protected prison buildings and structures within the site have been identified and should be retained, refurbished and productively reused. As such, the buildings would provide the potential to form a culturally and historically significant element in the future development and use of the site.

### PROPERTY MARKET

- 2.41 Light industrial land values in key locations have witnessed substantial growth over recent years, with values in Lisburn established between £350,000 - £400,000 per acre for serviced and accessible sites.
- 2.42 In terms of office uses, the economic outlook and prospects for the future are brighter than in the previous few years and there is real expectation that occupier demand from the private sector would show improvement.
- 2.43 There seems to be little evidence as yet of a slowdown in the residential property market. The fortunes of the market remain inextricably linked to the general health of the economy, the cost of borrowing and the affordability constraints on first time buyers. In Lisburn, indicative land values per acre have reached £780,000 - £1,000,000.
- 2.44 Property development activity across the local and sub-regional area would be of key importance, in terms of how these schemes impact upon supply and demand conditions. Of particular importance would be the Blaris Road site, to the north of Sprucefield which is identified in the BMAP for employment development, and between the urban area of Lisburn itself and the Maze/Long Kesh site.
- 2.45 The project would need to consider a sympathetic mix of uses to generate a sufficiently viable overall scheme whilst at the same time producing the required level of vitality and sustainability and ensuring the delivery of development of regional significance. This could be achieved through a number of key means:
- Infrastructure: Roads and public transport access providing connections between different land uses as well as ease of access for commercial activities;
  - Combining compatible uses to maximise economic, land use and social considerations, eg: Residential (mix of dwelling types and tenure, subject to planning); local retail supported by/ complementary to residential uses; Offices, with necessary car parking; Business units with ancillary

office accommodation; Leisure and entertainment, with the potential for a hotel development to complement other uses on the site;

- Giving 'life' to the site outside the traditional business hours and establishing a sense of community and 'ownership' for those involved in the scheme, as well as creating interest in the site as a successful regional destination.

### STAKEHOLDER REVIEW AND DEVELOPMENT OPPORTUNITIES

- 2.46 Consultation with key stakeholders has highlighted a number of potential opportunities to be considered in the development of Masterplan options:
- Potential for sports development to serve international, regional and community needs including a new multi-sport stadium;
  - Potential to build on the heritage of site through the development of an International Centre for Conflict Transformation which would provide visitor access, and an international centre for education and research into conflict management, resolution and transformation. In addition, potential has been identified for an aviation/transport heritage centre. The Ulster Aviation Society, currently temporarily storing aircraft at one of the World War II hangars, require permanent premises for its extensive collection of aircraft and historic records;
  - Subject to further detailed discussion, potential for relocation of the RUAS showgrounds from the existing site at Balmoral and development of new exhibition halls with close synergy with other activities (including shared use of common facilities such as parking and catering);
  - Potential, in association with Invest NI, to develop an Employment/Industrial Zone available for attraction of inward investment and business expansion opportunities;
  - Opportunity for multi-functional buildings to create year round activities on the site;

- Potential synergy with Down Royal Race Course and contribution to tourism development in the wider area;
- Requirement for improved hotel accommodation in the area and potential for provision on the Maze/Long Kesh site to serve these needs and to compliment other existing/ planned hotel development in the area;
- Subject to detailed consultation and appraisal, potential for the development of an equestrian centre in association with the showgrounds and the evolving equestrian strategy;
- Potential for development of a regional exhibition centre;
- Community access to the facilities, and sensitivity to the needs of the community located adjacent to the site.

2.47 Consultation with potential occupiers has highlighted the importance of a comprehensive development strategy which addresses a number of key issues including:

- Provision of necessary transport infrastructure to ensure site is accessible - this is a key consideration in attracting potential investors, occupiers and visitors to the site;
- Need to maximise shared use of facilities and parking provision - this would improve scheme viability and sustainability of uses and create a more active and vibrant destination;
- Site operation and management - there would be a requirement to create income streams to secure the financing of key site functions eg: the International Centre for Conflict Transformation, the maintenance of the new sports venues in the stadium. and the showgrounds.

### CONSTRAINTS AND OPPORTUNITIES

2.48 The baseline studies have highlighted a range of constraints and opportunities for the site. The Masterplan seeks to address these constraints and to capitalise upon the opportunities. Constraints and opportunities may be summarised as follows.

### CONSTRAINTS

2.49 The site is complex and presents a combination of constraints which would influence the development mix and quantum and timescale for development. These constraints relate in particular to current planning policy and infrastructure capacity.

- Although the site has been previously developed, it is not classified as a brownfield site. Whilst development of regional significance would be acceptable in accordance with the Draft BMAP, there is a presumption against other development unless it can be demonstrated that there is a requirement for some enabling development. On this basis it is anticipated that some residential development (say in the region of 200 units) may be acceptable as enabling development but in the longer term significant residential development would be dependent on Plan Review. This would impact on potential land uses in the context of current planning policy (up to 2015);
- Redevelopment could result in the displacement of development from other areas. It would be necessary to ensure that development is complimentary and would not prejudice regional development objectives as set out in the RDS;
- The site's location may be unattractive to foreign direct investment (FDI) and indigenous businesses in growth sectors such as services, finances and software. Invest NI advise that Northern Ireland's ability to attract new FDI for the manufacturing sectors is limited;
- There is limited road access to the site and a current lack of public transport services. Significant investment in new infrastructure would be required to accommodate site development including a new motorway junction;
- Existing site infrastructure and services are at capacity and there may be a requirement for significant investment in new infrastructure provision;
- There is currently a lack of critical mass within the local

population to ensure the viability of community facilities;

- Listed prison buildings and structures, because of their fixed position, would constrain site layout and access. It would be necessary for the Masterplan to integrate the listed buildings and to provide an appropriate setting for them;
- There is some risk of site contamination and a requirement for site remediation;
- The proximity of the River Lagan and surface waste drainage would be important in relation to dealing with run-off and water treatment;
- Whilst generally there is a lack of natural features, there are mature trees on the site which should be retained;
- The site has a significant visual impact, especially from the south, on near, medium-distance and far views. The Masterplan would be required to minimise impacts of new development on the landscape; and
- Noise pollution and air quality due to proximity of the motorway would restrict development opportunities on the southern edge of the site.

### OPPORTUNITIES

2.50 A number of opportunities are presented by the site due to its strategic location, size and relationship to the wider area. The following opportunities have been highlighted.

- The site is identified as a site of regional significance. The RDS seeks to facilitate development projects which would enhance the external competitive advantage of the region and to accommodate economic development of regional or sub-regional significance;
- There is the opportunity to review the development mix of the site and to incorporate an element of enabling development in the period up to 2015. It would also be possible to look at a phased development of the site in the context of future plan review beyond 2015 subject of course to the relevant planning context that applies at that time;

- The site is strategically located in relation to a large catchment area with a large number of qualified people which would be potentially attractive to location decision makers in the growth sectors;
- Development provides the potential to make opportunities available and accessible to deprived urban communities in the area;
- The provision of new physical and social infrastructure would improve the attractiveness and accessibility of the site;
- Provision for local enterprise, knowledge and high-tech could diversify the area's industrial and commercial offer and contribute to regional development objectives in accordance with the RDS;
- The listed buildings provide the potential to build on the historical significance of the site and to create a unique environment;
- The site provides the potential to create a new focus for community integration in accordance with the strategic objectives set out in "A Shared Future: policy and Strategic Framework for Good relations in Northern Ireland" and the RDS which promotes better community relations;
- Redevelopment could expand and diversify the area's commercial, leisure, tourism and cultural offer in accordance with the objectives set out in the RDS. Cultural links to Hillsborough and other amenities, and to Lisburn along the Lagan would support potential tourist uses;
- The provision of new road infrastructure and public transport facilities would have benefits for the wider population and integrate the development with the wider area;
- The site provides the potential for the promotion of sustainable development including sustainable drainage systems, water treatment and renewable energy production and sustainable construction methods;
- The site's current low ecological value could be significantly enhanced and the site linked into a network of green

spaces for wildlife and leisure uses;

- The visual appearance of the site could be significantly improved through sensitive development and landscaping which takes into account views of the site, particularly from the area of special landscape value to the north.



# EVOLUTION OF THE MASTERPLAN

## STRATEGIC OBJECTIVES

- 3.1 The overall objective is to establish an integrated Development Plan for the Maze/ Long Kesh which is economically and environmentally feasible and delivers best value for money and regeneration objectives. It would be required to provide a physical expression of the ongoing transformation from conflict to peace and to provide an inclusive and shared resource for the whole community.
- 3.2 The Masterplan has been prepared within the context of the Reinvestment and Reform Initiative (RRI), the wider regeneration objectives for the region and the Belfast Metropolitan Area and Section 75 of the Northern Ireland Act 1998 relating to equality and inclusiveness. The Masterplan is required to meet the Government's wide-ranging RRI objectives and be capable of being delivered in a long term sustainable manner whilst maximising value for money. Quality in land use and built form would be essential in meeting these objectives but the Masterplan must also meet the needs of communities both now and in the future and be capable of implementation. There would be a requirement to develop proposals which are based on a clear understanding of development opportunities and the identification of transport infrastructure requirements that would facilitate regeneration of the area.
- 3.3 Historically and environmentally the site promotes a significant opportunity for a sustainable approach to development and to bring the site back into use through the promotion of an appropriate mix of uses. Development would be required to respect the natural environment and unique historic character of the site. The challenge is to develop a comprehensive plan for structuring the future development of the site rather than a series of individual piecemeal development projects.
- 3.4 The development offers the potential to bring significant and long term benefits to the whole community as part of

the RRI initiative. Development options have been assessed in relation to these strategic objectives. The key strategic objectives which would guide development of the site are set out below:

- To capitalise on the strategic location and unique assets of the site and maximise regional benefits;
- To promote development of regional significance which would act as a catalyst for social and economic regeneration and achieve a step change in opportunities for the whole community;
- To accelerate and provide a physical expression of the on-going transformation from conflict to peace which builds on the heritage of the site and creates a neutral and welcoming venue which is accessible to all;
- To identify and promote lead projects which are creative and innovative and would act as a catalyst to unlock the potential of the site and to maintain all-party and community support;
- To strengthen the regional economy and tackle social disadvantage in accordance with the RDS (including the promotion of private investment and new employment and training opportunities);
- To achieve equality of opportunity and provide an inclusive shared resource (in accordance with Section 75 of the Northern Ireland Act and New TSN);
- To establish an integrated Development Plan and implementation strategy which is economically, technically and environmentally feasible and capable of delivery within an acceptable timescale;
- To promote best practice in sustainable development and minimise environmental impacts and as far as possible protect and enhance the existing bio-diversity of the site;
- To achieve value for money and minimise public subsidy within a framework of delivering the social and economic objectives of the Maze Consultation Panel and RDS;

- To be an example of good practice in terms of quality of architecture and good design incorporating best practice in public art and to capture the significance of the site.

## DEVELOPMENT COMPONENTS

- 3.5 The starting point for the preparation of the Masterplan was the cross-party Maze Consultation Panel Report which sets out a range of development components which the panel considered should be accommodated within the Maze/ Long Kesh development. The Panel Report recommended the development of a Masterplan to include:
  - A multi-sports stadium;
  - An International Centre for Conflict Transformation based on the listed prison buildings and structures to be retained on the site;
  - Employment Zone;
  - A Rural Excellence and Equestrian Zone including an International Exhibition Centre and showgrounds;
  - Offices, hotel and leisure village;
  - Community Zone.
- 3.6 Consultation with key stakeholders has identified a number of specific development requirements.
- 3.7 It is intended that the International Centre for Conflict Transformation would play an important role in the transformation of the region in the period of post-conflict normalisation through promoting a shared society. With links to local universities, and organisations in other parts of the world that have undergone or are going through periods of similar transformation and change, such as the Balkans, Southern Africa and the Middle East, the International Centre for Conflict Transformation would provide a facility to support and facilitate the ongoing process of dialogue and building trust and confidence within and between communities and allow others to learn from the problems the community has experienced and how these are now being resolved.

3.8 The Panel concluded that the multi-purpose sports stadium should provide a high quality international team sports venue that can be shared by major team sports, including Gaelic Sports, Association Football and Rugby Union. Sport has long been a tool for reconciliation, and the use of the new facility by the three main sporting bodies would assist in promoting tolerance and respect for diversity.

3.9 It was proposed that the development of these two regionally significant facilities should be supported by a number of other uses, with the aim of establishing a development that is both sustainable and deliverable. Regeneration of the site would be integrated in its local and wider context, through promoting a mix of uses that optimise the sites strategic location and providing the necessary transport and physical infrastructure.

### MASTERPLAN SCENARIOS

3.10 Four alternative development scenarios were developed as a basis for Masterplan preparation and these have been subject to a rigorous technical assessment. It is emphasised that these scenarios were developed with the specific objective of allowing a robust assessment of alternative approaches to site development and delivery of the key components identified by the cross-party Maze Consultation Panel Report. In addition to these four scenarios, a non-stadium base case scenario was also considered. This has allowed an assessment of development opportunities in the possible event that proposals for a multi-sports stadium do not proceed and has been used as a base case scenario in order to identify the implications for delivering the other development components on the site and the timescale for development.

3.11 The purpose of the technical assessment was to identify the most suitable combination of the key development components taking into account a range of criteria relating to strategic objectives and economic, social and environmental sustainability.

3.12 The key principles underpinning the development scenarios may be summarised as follows:

- Creating a mix of land uses that provides facilities of regional importance, a sense of place, high quality employment and facilities for local communities, while preserving the archaeological and heritage potential of the site;
- Ensuring there is appropriate road access, public transport provision and parking on the site, taking into account environmental capacity and economic viability;
- Balancing land use and access within an urban design and landscape strategy, that provides valuable open space and makes provision for energy, water and other services in the most environmentally beneficial way;
- Achieving this within the constraints of ground contamination, noise, air quality, water quality and flood risk;
- Setting targets for carbon emissions, water use, water quality, economic performance and social success.

3.13 The scenarios may be summarised as follows:

- Scenario 1- Land allocations for individual development components and development mix are consistent with the Maze Panel Report;
- Scenario 2- Allocation for sports zone and leisure facilities increased and Light Industrial Zone reduced in size;
- Scenario 3- Allocation for Light Industrial Zone/employment increased and Sports Zone reduced in size;
- Scenario 4- Sports Zone and Light Industrial/Employment Zone reduced in size and provision made for an element of residential development.

3.14 The four scenarios incorporate all of the development components identified in the Panel Report but consider

different combinations of uses and variations in the size of individual components. The general location of the International Centre for Conflict Transformation is fixed by the listed buildings and structures. The Centre would incorporate the existing listed structures of the former Maze/Long Kesh prison complex, and these are located in the westernmost part of the complex. The two World War II aircraft hangars immediately to the north of the listed prison structures have also been scheduled as historic monuments, and together these structures could form the basis of a heritage and cultural arc in the western part of the site.

3.15 The principal element of the sports zone is the multi-sports stadium. There are a number of possible scenarios for the stadium, in terms of development and delivery models, the format of the stadium and inclusion of other leisure and commercial uses, access arrangements and location.

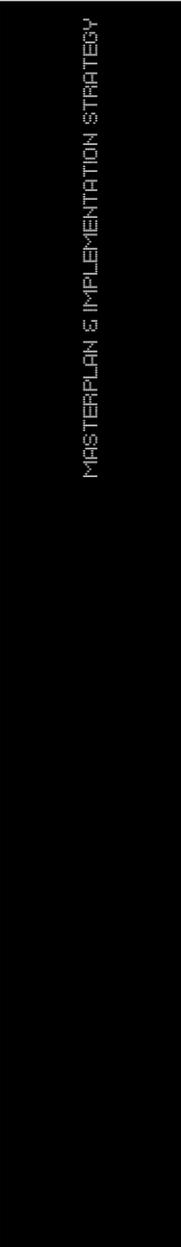
3.16 The development of these broad scenarios has allowed a robust assessment of alternative approaches to development and the delivery of the key development components identified by the cross-party Maze Consultation Panel.

### APPRAISAL OF MASTERPLAN SCENARIOS

3.17 In the event of the Multi-Sports Stadium at the Maze/Long Kesh site not being developed, it is considered that the development potential and timescale for development of the wider site would be seriously compromised. The key issues may be summarised as follows:

- The development would be contrary to the cross-party Maze Consultation Panel report and would not satisfy RRI objectives;
- The Masterplan would lack a strong focus and catalyst for other development;
- Housing development in the period to 2015 would be difficult to promote without a major project of regional significance;

- Timescale - development could be delayed to post 2015;
- The development would be less likely to deliver regeneration benefits/ act as catalyst for change;
- RUAS is considered unlikely to relocate the showgrounds unless other active public uses are also located on the site to provide year round activity and vitality;
- It would be difficult to deliver the International Centre for Conflict Transformation as envisaged by the Maze Consultation Panel without, as envisaged, the provision of the stadium within the same timescale;
- An inward investment zone would be difficult to promote given scale of infrastructure improvements required.



### SCENARIO 1: MAZE CONSULTATION PANEL

3.18 The Maze Consultation Panel scenario comprises a range of land uses:

- Sports Zone including stadium and arena
- International Conflict Transformation Centre
- Rural Excellence and Equestrian Zone
- Leisure Village
- Employment Zone
- Community Zone
- Retained Zone
- Arts and Iconic Work
- Landscape/parkland
- Reserve Area with potential for development post 2015

3.19 Scenario 1 has a number of advantages:

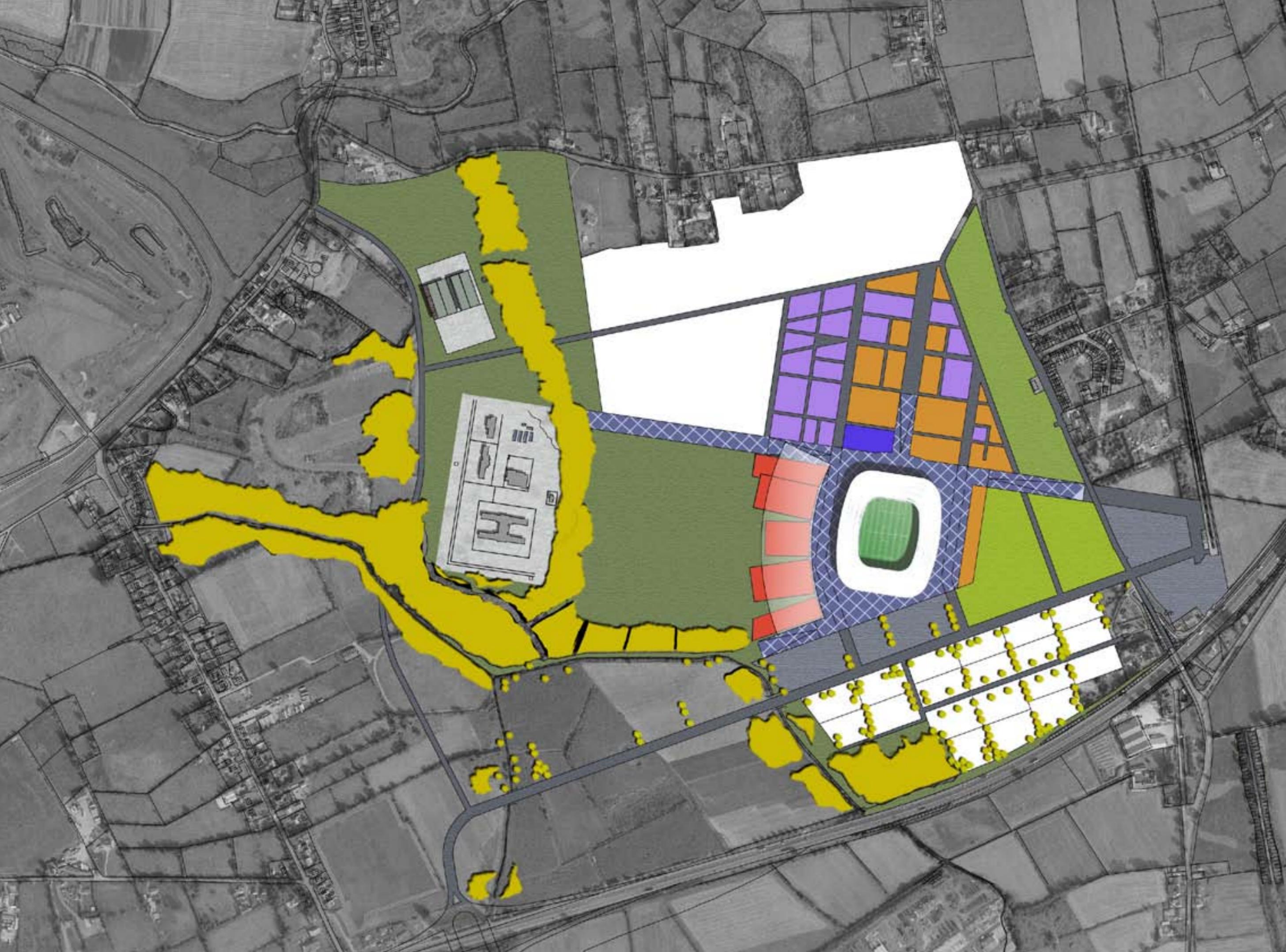
- It is in accordance with planning policy and the designation for development of regional significance and is therefore likely to be acceptable on planning policy grounds;
- It includes an employment allocation and has the potential for the creation of in the region of 6500 jobs. Regeneration benefits would therefore be secured although these are likely to be over an extended timescale due to current market demand and the availability of alternative sites;
- It would promote the strategic objectives of an inclusive development and equality of opportunity through the development of a multi-sports stadium, International Conflict Transformation Centre, community facilities and potential for new training and employment opportunities;
- The Panel Scenario has the support of the four main political parties and has involved public consultation

3.20 The key weaknesses of Scenario 1 may be summarised as follows:

- Place making- mix of uses/ activity/ vitality and ability to secure year round activity;
- Design/masterplanning- mono-use and limited integration of land uses;
- Uncertainty regarding market demand and timescale for employment take-up



Figure 3.1 Scenario 1: Consultation Panel Development Scenario



## SCENARIO 2: SPORT, LEISURE AND CULTURE

3.22 This scenario builds on the recommendations of the Consultation Panel report but seeks to provide a stronger focus on sports, leisure and culture and the potential synergies between the sports and exhibition uses on the site. This could provide a stronger destination and identity for the site. Scenario 2 focuses on the Maze/Long Kesh's potential to become a major visitor and events destination, with 3 principal uses – the International Conflict Transformation Centre, Sports Zone and Exhibition complex – in a parkland setting. These uses are complemented by service facilities such as office, leisure, food, retail, and hotels. This scenario could create a stronger identity for the site as a sports, cultural and entertainment centre, both on its own and as part of the wider tourism offer of the area that would include Lisburn and the historic villages, the Lagan River Valley and Lough Neagh. The scenario seeks to exploit the site's location and build on its heritage assets, to create a major destination for the sub-region, bringing together a number of different sports and cultural functions within a high quality parkland environment.

3.23 Scenario 2 has a number of strengths, notably:

- It is likely to meet test of regional significance in planning policy terms;
- It promotes tourism in line with RDS objectives;
- It offers the potential for 5100 jobs but largely in the service sector. It would therefore have regeneration benefits but this would dependent on timescale for take-up;
- It promotes objectives of inclusive development and equality of opportunity through promotion of sports and leisure development and International Conflict Transformation Centre;
- Creation of strong destination with potential for high quality design/ iconic buildings/ public art

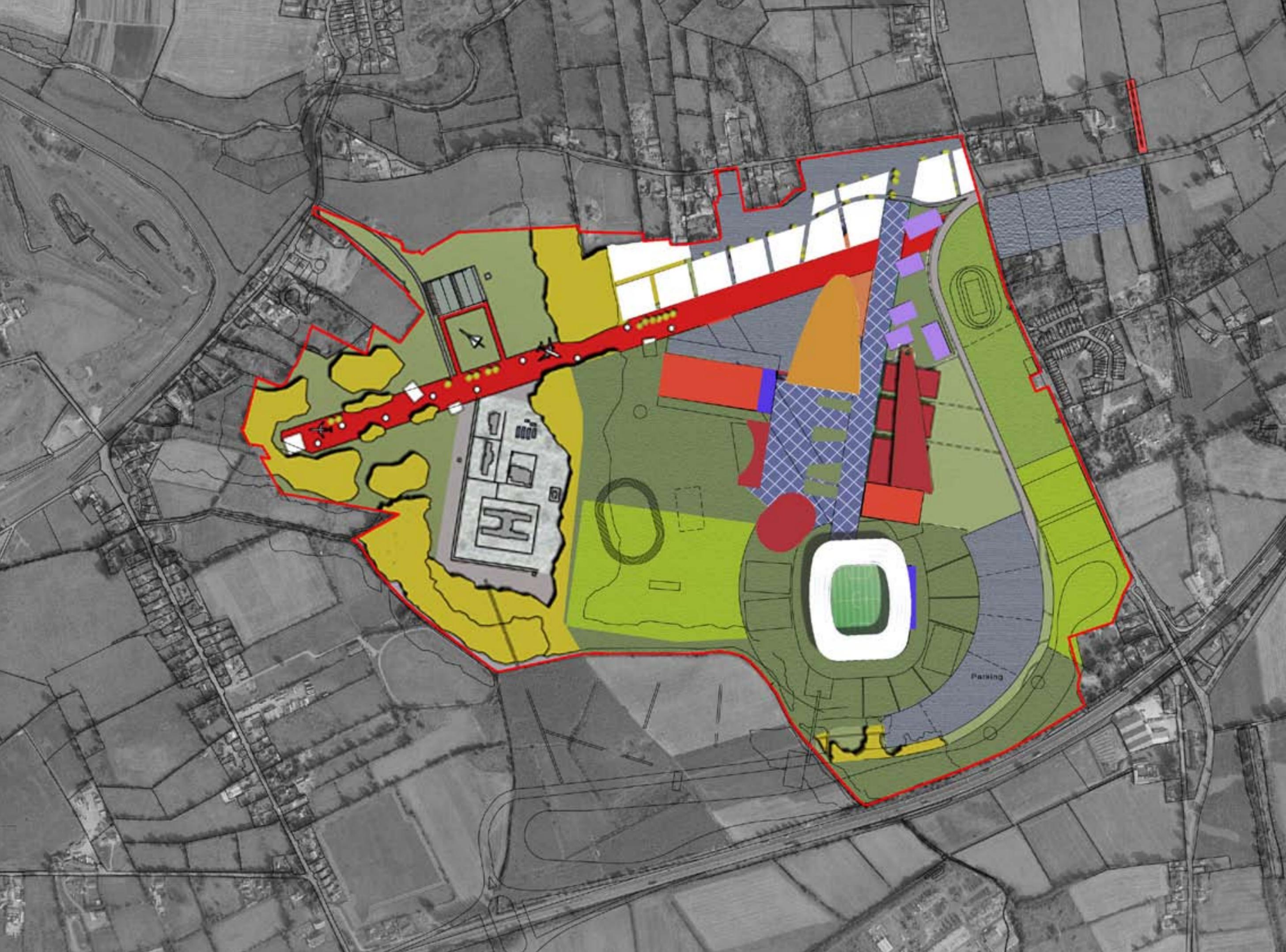
3.24 The principal weaknesses may be summarised as follows:

- Market demand- uncertainty regarding demand/ take-up of commercial leisure opportunities;
- Uncertainty regarding funding for full range of sports facilities;
- Lack of range of employment opportunities- no significant strategic employment allocation;
- High level of development costs;
- Relatively low development value generated which reflects land use mix;
- Deliverability/ funding- the development gives rise to a significant affordability gap.

3.25 The stadium has a more conventional design and does not incorporate a podium. It is considered that this would result if a lower quality of development and affect the quality of the environment of the site. Parking and servicing would be more intrusive and it would be more difficult to create a high quality pedestrian priority area as the focus of the site.



Figure 3.2: Scenario 2: A Focus on Sports, Leisure and Culture



### SCENARIO 3: EMPLOYMENT, ENTERPRISE AND TECHNOLOGY

- 3.26 This scenario focuses on the site's potential as a major employment site, exploiting its strategic location on the east-west Lagan Valley corridor, as well as the north-south Belfast / Dublin corridor. This has obvious potential for logistics functions, but also offers the potential for siting a new office node, major education facilities, and exploiting the synergies between these to locate new research and innovation facilities on the site. Scenario 3 exploits the strategic location on the M1/A1 transport corridor to promote the site as a major employment location and centre of excellence, including offices and light industry. The site would also include a significant educational component, with crossover between this and the employment functions to allow the development of a research and innovation centre. The International Conflict Transformation Centre and Sports Zone would be provided but with more limited land allocations and associated sports and cultural uses, while the exhibition complex would principally serve the employment and education uses.
- 3.27 The principal strengths of Scenario 3 may be summarised as follows:
- It is in accordance with planning policy/ RDS regarding the promotion of regional economic development and inward investment;
  - It makes provision for strategic employment opportunities;
  - It is estimated that this scenario would have potential for upto 7900 jobs. This would have significant regeneration benefits but may not be achievable given likely rate of take-up, current demand and availability of alternative sites
  - Promotes inclusion/ equality of opportunity subject to access for whole community to training, employment, education and sports facilities.

- 3.28 The key weaknesses of Scenario 3 may be summarised as follows:
- Uncertainty regarding market demand and take-up of employment land;
  - Possible displacement of employment development from other strategic sites;
  - Mono-use and lack of development mix would impact on quality of development, vitality of site and levels of activity;
  - Traffic impact and high level of peak hour flows to site;
  - Relatively low development value generated reflected in affordability gap
  - Concern about deliverability and timescale for development given over-dependence on employment development. Development would be phased over a longer period.
- 3.29 The stadium has a more conventional design and does not incorporate a podium. It is considered that this would result in a lower quality of development and affect the quality of the environment of the site. Parking and servicing would be more intrusive and it would be more difficult to create a high quality pedestrian priority area as the focus of the site.



Figure 3.3: Scenario 3: A Centre for Employment, Technology, Education and Excellence

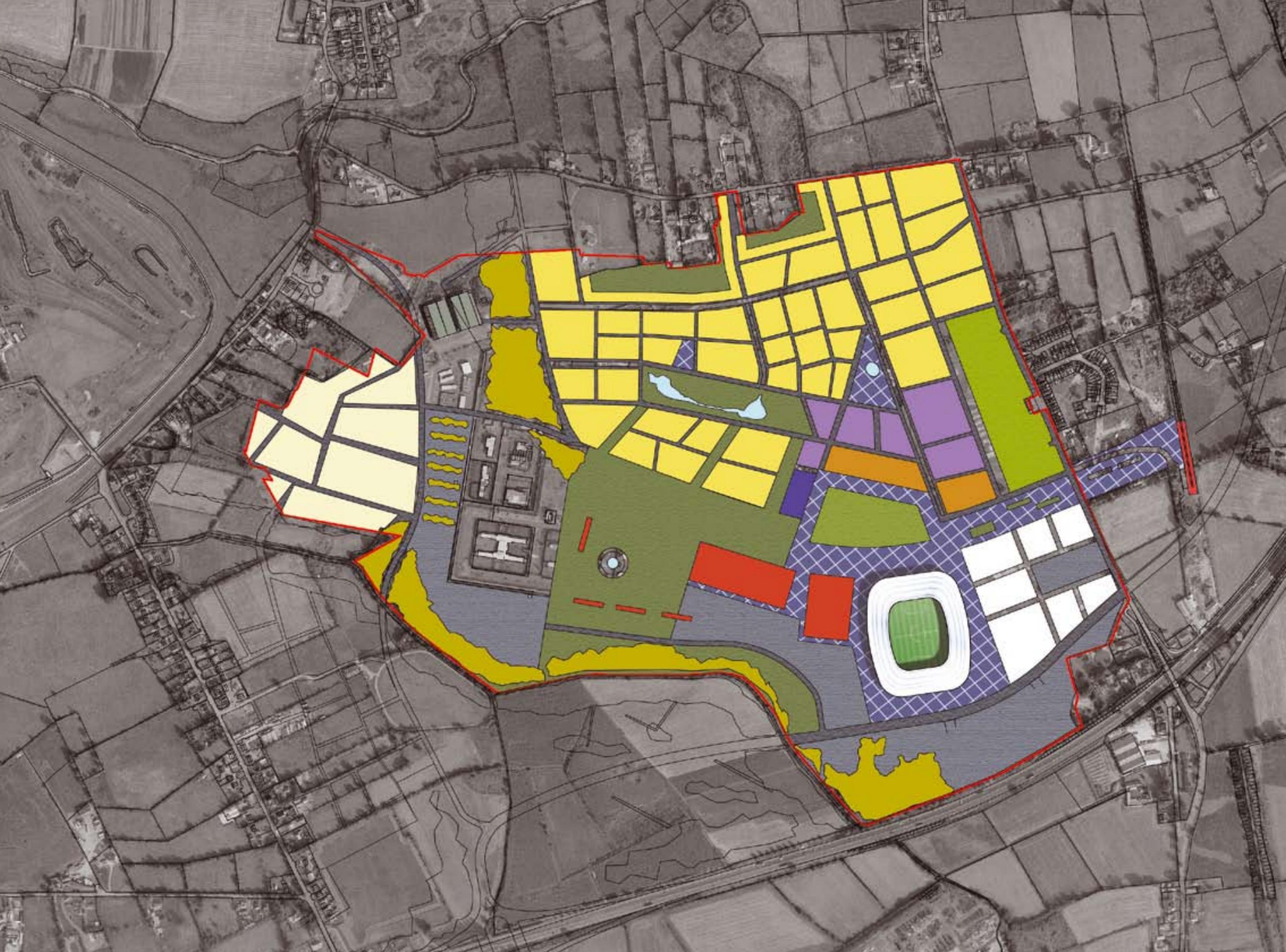


### SCENARIO 4: NEW URBAN VILLAGE

- 3.30 This scenario includes a significant housing component but aims to deliver a greater mix of uses across the site based on the urban village model. The new 'village' would form part of the existing ring of villages to the southwest of Lisburn, each with its own identity and local facilities. The development would include a local centre with some general employment uses, including industrial and office space, as well as hotel and leisure functions, a primary school and other community facilities. The Sports Zone, International Conflict Transformation Centre, and Rural Excellence Centre are included in this scenario within a parkland setting as shown below.
- 3.31 The principal strengths of Scenario 4 may be summarised as follows:
- It provides a more balanced mix of uses which would create a sense of place/ higher levels of year round activity and a sustainable pattern of development;
  - It would promote an inclusive development with equality of opportunity- subject to access to training/ employment and inclusion of integrated housing/ community facilities
  - It would maximises development value and reduces the affordability gap
  - It would maximise benefits of investment in new infrastructure provision
- 3.32 The principal weaknesses of Scenario 4 may be summarised as follows:
- It is not in accordance with planning policy and the scale of residential development would not be acceptable under the current BMAP;
  - It provides a limited strategic employment allocation/ economic development benefits;
  - It would provide the overall potential for about 3100 jobs which is the lowest of the four scenarios.



Figure 3.4: Scenario 4: A New Urban Village



## SUMMARY OF ASSESSMENT FINDINGS

3.33 Key issues emerging from the initial assessment may be summarised as follows:

- There is a funding 'gap' under all scenarios and the inclusion of an element of housing development reduces this 'gap';
- The scale of housing development proposed in Scenario 4 raises significant planning policy issues and would not be acceptable under the current BMAP;
- Infrastructure provision and costs need to be justified by socio-economic benefits;
- The timescale/ apportionment of costs for infrastructure works;
- The need to review the overall transport strategy considering existing strategic network constraints;
- The need to review the mix of land uses within the existing planning policy context with the objective of increasing land values;
- The need to maximise shared facility and car parking solutions;
- The assessment confirms the value, functionality and flexibility of the stadium podium. This arrangement is considered to maximise the potential for shared parking/ services and provides a high quality and attractive focus for the site

## PREFERRED MASTERPLAN SCENARIO

3.34 On the basis of the scenario assessment, it was concluded that elements of Scenario 1 would provide the most appropriate basis for the development of a long term integrated development plan for the whole site but that some adaptation would be necessary.

3.35 The financial appraisal has demonstrated that there is a significant affordability gap and a requirement to review the

overall mix and phasing of development to maximise site value and thereby reduce the affordability gap. In particular, the appraisal of Scenario 4 has demonstrated how the inclusion of residential development significantly increases the value of the site and reduces the potential funding gap and also provides a more balanced and sustainable mix of uses.

3.36 The weaknesses identified in the assessment of Scenario 1 have been addressed in the development of the preferred masterplan scenario, notably:

- The need to review the transport strategy to maximise public transport use/minimise infrastructure costs;
- The need to review the mix of land uses and to include provision for housing in the context of current planning policy and potential for early enabling development;
- The potential to increase land values for example, by increasing density and changes to land use mix;
- The importance of shared facility and car parking solutions;
- The need to create a more attractive year round destination and to ensure the viability of proposed facilities;
- The need to promote a more sustainable form of development.

3.37 The assessment of the alternative masterplan scenarios has confirmed the value, functionality and flexibility of setting the stadium on a podium. This arrangement would maximise the potential for shared parking/ servicing arrangements between the major traffic generators and provide a strong public focus for the site

3.38 The preferred masterplan scenario provides the basis for the Masterplan which is set out in detail in Section 4. It addresses the key issues identified in the assessment of the Masterplan scenarios and creates a framework which could be taken forward as the basis for site development. In particular, it:

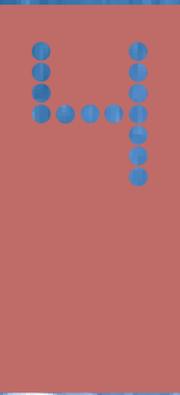
- Seeks to work within planning parameters;
- Creates a balanced mix of uses;
- Maximises opportunities for sharing of parking/ facilities;
- Provides for the phasing of development and infrastructure provision;
- Provides flexibility with the potential for increased residential development/site value post 2015 subject to plan review.

3.39 The proposed arrangement for the stadium includes the incorporation of a podium which serves a number of key design functions. It provides parking for a significant number of cars thereby freeing up other land from parking provision and provides common service areas for the stadium, arena and exhibition halls. It also provides a high quality, traffic free public realm and focus for the site which would be activated through the use of public art and provide a venue for a range of outdoor events. Whilst the provision of the podium has a cost consideration, it is considered that this arrangement would provide a higher quality environment for the stadium and exhibition halls and have significant benefits for the success of the development as a whole.

3.40 Key elements of the preferred masterplan scenario comprise the following:

- Multi-sports stadium/ Sports Zone to include sports pitches and arena;
- International Centre for Conflict Transformation based on existing listed buildings and new visitor/ education facilities and including reuse of hangars for display of aircraft;
- Housing – subject to Plan Review, in region of 200 units up to 2015, to include integrated mixed housing which would promote inclusion and equality objectives. Whilst in the region of 200 units may be acceptable as enabling development in the current plan period up to 2015, in the longer term housing development would be subject to Plan Review;

- Employment - provision for mix of employment types and range of employment opportunities (in region of 6000 jobs);
- Exhibition halls/show grounds with facilities shared with Equestrian Centre to meet occupier requirements;
- Strong leisure/culture/ entertainment focus;
- Parkland setting with provision of central park which would promote objectives of inclusion, community and integration and increase development values;
- A sustainable residential community with a unique offer;
- Park and Ride facility linked to possible new rail link-potential for use for stadium parking;
- Comprehensive parking strategy for stadium comprising a mix of permanent, temporary and shared provision.



# MASTERPLAN

## THE VISION

- 4.1 The vision for the site is of a vibrant and successful mixed use development which would build on the area’s significant assets and create a distinctive destination offering a range of opportunities for the whole community.
- 4.2 The Maze/Long Kesh has the potential to become a regional focus of activity and opportunity - offering a rich diversity of uses throughout the year. Our overall vision for the site is:
- 4.3 ‘a development of regional significance with a vibrant and successful mix of uses which builds on the area’s significant historic, strategic and environmental assets and creates a distinctive destination offering a range of opportunities for the whole community’.
- 4.4 The vision is based on an overall commitment to sustainable development objectives - making land available to improve the quality of life and the environment; contributing to sustainable economic growth; protecting and enhancing the historic and natural environment; promoting public transport; ensuring high quality development through good design and ensuring that development supports existing communities and makes a lasting contribution to the prosperity of the whole community.
- 4.5 Under this vision, the Maze/Long Kesh would become an active, dynamic and vibrant destination offering a comprehensive range of facilities and well integrated with its surroundings. The regeneration and transformation of the site would take place within a distinctive setting of attractive new buildings, quality public realm and new public spaces. It would become the focus of activity and opportunity - offering a rich diversity of uses throughout the year.
- 4.6 The development would build on the history of the area and become an exemplar for sustainable development contributing to economic growth, equality and environmental

enhancement. The regeneration and transformation of the site would take place within a distinctive setting of attractive new buildings, quality public realm and new public spaces. Key elements of this vision may be summarised as:

- The creation of a unique destination
- A strong sense of place and distinctive character
- Year round activity
- High quality design
- Vibrant and active throughout the day and year
- Successful and viable
- A showcase for sustainable development
- An inclusive facility for all.

4.7 High quality design and the provision of necessary infrastructure would be critical in achieving sustainable development objectives and improving the quality of life. The Masterplan places particular emphasis on high quality and innovative design solutions.

4.8 The Masterplan aspires to the creation of a distinctive place and destination and to facilitate and promote good quality development. The key development principles may be summarised as follows:

- Accommodation of user requirements and stakeholder aspirations
- Maximising synergy/potential for shared facilities
- Promoting accessibility
- Integration with surrounding area
- Maximising local/regional benefits
- Harnessing the value of heritage
- Securing delivery

4.9 The Masterplan addresses the principal aims of sustainable development in an integrated manner, namely:

- Sustainable economic development;
- Social inclusion and equality;
- Protection and enhancement of the environment; and
- Prudent use of resources.

4.10 The Masterplan establishes a robust planning policy framework and is underpinned by the following sustainable development objectives:

- Promoting regeneration, to improve the wellbeing of communities, improve facilities, promote high quality and safe development and promote mixed use development that create linkages between different uses and create more vibrant places;
- Promoting regional, sub-regional and local economies by promoting sustainable economic growth to support efficient, competitive and innovative business, commercial and industrial sectors;
- Promoting communities which are inclusive, healthy, safe and crime free whilst respecting the diverse needs of communities;
- Meeting expected needs for development taking into account accessibility and sustainable transport needs and the provision of essential infrastructure;
- Giving priority to ensuring access for all to jobs, health, education, shops, leisure and community facilities;
- Recognising the need to enhance and protect biodiversity and to offset adverse environmental effects;
- Promoting the more efficient use of land through higher density mixed use development and bringing vacant and underutilised land back into beneficial use; and
- Reducing the need to travel and encouraging public transport provision to secure more sustainable patterns of transport.

- 4.11 The Masterplan proposals set out in this document begin to articulate the vision for the site- the creation of a unique and inclusive destination that would leave a legacy of regeneration and transformation. The Masterplan has been prepared within the context of current planning policy which reserves the Maze/Long Kesh site for development of regional significance whilst recognising that development would be phased and the timescale for development would extend beyond the review of the current RDS and BMAP. It seeks to build on the strategic location and historical importance of the site to create an attractive destination for people to enjoy a range of leisure, cultural and recreational facilities; a location for investment in new business development and a high quality, sustainable and inclusive living environment.
- 4.12 The mix of uses proposed for the site takes account of current market trends and opportunities but the Masterplan also takes a long term view of development opportunities and the unique potential presented by this site. The proposed phasing of development has taken into account specialist property market advice but the Masterplan and phasing of development will be subject to review in the light of changing conditions and opportunities.
- 4.13 The Masterplan includes a reserve area of 25.72 hectares (63.55 acres) for which no specific land uses have been identified at this stage. The future use of this land post 2015 would be determined as part of the review of the Masterplan in the context of the review of the BMAP and planning policy at that time.
- 4.14 The development components of the Masterplan are summarised in Table 4.1 and are illustrated in Figure 4.1.

**Table 4.1: Masterplan- Development Components**

Element	Components	Area (Hectares)	Area (Acres)
International Centre for Conflict Transformation	Listed prison buildings Retained Aircraft Hangars International Centre for Conflict Transformation to comprise reuse of existing buildings and new iconic building (including possible accommodation, academic, meeting and archive facilities)	8.5	21.0
Sports Zone	Multi-sport Stadium Indoor arena Training pitches Hotel Food & beverage Office accommodation Community uses	20.13	49.74
Rural Excellence and Equestrian Zone	International Exhibition Centre including exhibition halls, outdoor show grounds and equestrian facilities	16.92	41.81
Employment	Offices, Business, Research Logistics, research, light industrial Range of plot sizes	26.72	66.03
Leisure & Entertainment	Leisure/entertainment facilities eg: cinema, bowling alley, ice rink, health club Restaurant/cafes/bars Specialist retail	2.45	6.05
Community Zone	Local facilities, including sports pitch, play areas	2.76	6.82
Phase 1 Housing	200 units up to 2015 Mix of unit sizes and tenure	5.71	14.11
Reserve land for future use	Reserve for future use	25.72	63.55
Parkland & Landscaping	Central parkland with water areas Structural landscaping Retention of existing trees Bio-mass production	29.49	72.87
Waste Water Treatment Plant		2.3	5.68
<b>Total</b>		<b>140.70</b>	<b>347.66</b>



**LAND USE COMPONENTS**

MULTI-SPORTS STADIUM & SPORTS ZONE	20.13 ha	(49.74 acres)
INTERNATIONAL CENTRE for CONFLICT TRANSFORMATION	8.5 ha	(21.0 acres)
RURAL EXCELLENCE & INNOVATION CENTRE	16.92 ha	(41.81 acres)
EMPLOYMENT	26.72 ha	(66.03 acres)
LEISURE/ENTERTAINMENT	2.45 ha	(6.05 acres)
COMMUNITY	2.76 ha	(6.82 acres)
PARKLAND/LANDSCAPE	29.49 ha	(72.87 acres)
PHASE 1 RESIDENTIAL	5.71 ha	(14.11 acres)
WWTP	2.3 ha	(5.68 acres)
RESERVE LAND for FUTURE USE	25.72 ha	(63.55 acres)
<b>SITE TOTAL</b>	<b>140.70 ha</b>	<b>(347.66 acres)</b>
OFF SITE WORKS	7.5 ha	(18.53 acres)
<b>TOTAL</b>	<b>148.2 ha</b>	<b>(366.19 acres)</b>

Figure 4.1: Masterplan Landuses

## MASTERPLAN PRINCIPLES

4.15 The proposed development comprises:

- A multi-sports stadium with a capacity for some 42,000 spectators which would be used for gaelic sports, rugby and football in addition to open air concerts and other large events. It is also envisaged that the stadium would contain a hotel, conference facilities, offices and community uses such as training space;
- An International Centre for Conflict Transformation which would include a new iconic building and appropriate use of the existing listed buildings; visitor facilities and the reuse of the aircraft hangars for the display of historic aircraft and exhibition space;
- High quality employment space with the potential for a range of business uses and the creation of upto 6000 jobs across all sectors including in the region of 4000 jobs over the longer term in the light industrial, offices and business sectors;
- A Rural Excellence and Equestrian Zone to include an International Exhibition Centre and associated showgrounds and equestrian centre;
- A multi-purpose largely sports based arena with a capacity for 3,000 spectators;
- Leisure and entertainment facilities including cafes/restaurants, specialist retail and a multi-screen cinema;
- High quality new housing and community facilities;
- Parkland and landscaping to ensure the integration of the site with the surrounding landscape, links to the Lagan Valley and the creation of a high quality environment and destination;
- High quality design to maximise development and minimise costs
- Parking to serve the needs of the development
- Public transport including the potential for a rail link to Lisburn and Belfast and park and ride facilities
- a reserve area of land for future use

4.16 The key principles underlying the Masterplan may be summarised as follows:

- The promotion of a high quality, mixed use development which can be phased over time;
- The creation of an inclusive and accessible destination;
- The integration of the development area with the wider area through the provision of new infrastructure including transport links, pedestrian and cycle ways, amenities and new facilities to serve existing and new residents;
- The promotion of synergy between uses and sharing of facilities eg: parking, service areas, exhibition space, catering and other facilities;
- The creation of a strong focus of development which integrates public uses in an attractive high quality public realm with landscaping and public art;
- Reducing the impact of motor vehicles over the long term development phases with a reduction in surface parking and good public transport services within and to the site;
- The promotion of sustainable development objectives including sustainable construction methods and the use of renewable energy;
- A high quality landscape which integrates the site with the surroundings and the Lagan Valley and provides an attractive destination for visitors and residents
- Prudent use of resources

4.17 The structure of the Masterplan is derived from the inter-relationship of the following aspects:

- Routes and connections
- The open space and public realm network
- Infrastructure and services
- Interconnecting zones of activity

4.18 The Masterplan is illustrated in Figure 4.2.



4.19 At the heart of the Masterplan is a deep rooted emphasis on integrated design. Every aspect of life at the Maze/Long Kesh from the design of buildings and spaces, the careful integration of landscape and water to the easy access of recreation and sports opportunity would embrace new thinking in terms of sustainable life styles and well being. The Masterplan is embedded in sustainable development principles including:

- Good access to public transport and reduced dependency on the car
- A mix of uses and key leisure facilities which would reduce the need to travel
- A significant urban drainage system (SUDS)
- A network of safe and dedicated pedestrian and cycle routes
- An emphasis on the protection and enhancement of local landscape and ecology
- Building design that utilises state of the art thinking on sustainable construction methods, sustainable uses of materials and renewable energy

4.20 The Masterplan would also deliver potentially significant changes at the social and cultural level including:

- Public access to a diverse range of sporting and leisure activity which would promote healthy living and inclusiveness
- Access to sporting and cultural events for all
- High levels of social inclusion
- Business development to help encourage inward investment and indigenous business;
- Other suitable development projects.

The Masterplan is illustrated in Figure 4.2



# MAZE / LONGKESH MASTERPLAN



- 1 STADIUM
- 2 INTERNATIONAL CENTRE FOR CONFLICT TRANSFORMATION
- 3 INTERNATIONAL EXHIBITION CENTRE
- 4 EQUESTRIAN CENTRE AND SHOWGROUNDS
- 5 PARK
- 6 EMPLOYMENT
- 7 ARENA
- 8 LEISURE
- 9 COMMUNITY SPORTS
- 10 RAIL LINK/ PARK & RIDE
- 11 EMPLOYMENT
- 12 RESIDENTIAL AND COMMUNITY FACILITIES
- 13 FUTURE RESIDENTIAL
- 14 NEW JUNCTION ON M1
- 15 UPGRADE BLARIS ROAD

Figure 4.2: Maze / Longkesh Masterplan



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## MOVEMENT AND TRANSPORT ROUTES AND CONNECTIONS

- 4.21 The integration of any particular area with the areas surrounding it is critical to its successful functioning as a location for living, working and recreation. This is dependent on the quality of routes and connections. The Transport Strategy is considered in further detail in Section 5.

### ROAD HIERARCHY

- 4.22 The Masterplan provides two principal points of access:
- New motorway junction and primary road link to M1
  - Upgraded Blaris Road
- 4.23 An additional further point of secondary access is proposed by re-opening the existing Gravelhill Road/Long Kesh Road in the vicinity of Down Royal Race Course with localised access from Bog Lane.
- 4.24 The Masterplan proposes a hierarchy of roads which is illustrated in Figure 5.3. The road hierarchy comprises:
- A primary route linking the M1 motorway junction with Blaris Road. This would enable the closure of Halftown Road except to through traffic and the diversion of through traffic through the Maze/Long Kesh site. This would benefit the residential community on Halftown Road;
  - Secondary routes linking Gravelhill Road/Long Kesh Road with the motorway junction and Blaris Road and connecting zones of activity;
  - Access roads serving individual zones of activity.

### PUBLIC TRANSPORT – RAIL LINK AND PARK & RIDE

- 4.25 Maximising the opportunity for access to the site by public transport would be essential in promoting sustainable development objectives over the long term and addressing issues of traffic congestion.

- 4.26 The Masterplan provides for the potential provision of a rail link to connect with the existing mainline railway which runs north of the site with connections on to Lisburn and Belfast. The rail link could utilise the route of the old G.N.R Banbridge & Castlewella Branch line which runs within 400 m of the site. The provision of a rail link would provide public transport access to the site and potential for the implementation of an associated all year round commuter park and ride facility for both Lisburn and Belfast. The park and ride facility could be used on event days for spectator car parking in association with the stadium and other major events.

### PEDESTRIAN AND CYCLE ROUTES

- 4.27 The Masterplan provides an extensive network of pedestrian and cycle links within the site and with the surrounding area and Lagan Valley. This would serve to encourage walking and cycling as an alternative to the car.

### ACCESS FOR ALL

- 4.28 In keeping with the recommendations of the cross-party Maze Consultation Panel, the concept of inclusivity is a cornerstone of the vision for the development of the Maze/Long Kesh. The Masterplan would ensure access for all, including those with disabilities. An inclusive environment would be created which meets the diverse needs of different groups. Public transport and road infrastructure would facilitate and maximise freedom of access by the whole community from all parts of the region and the island.



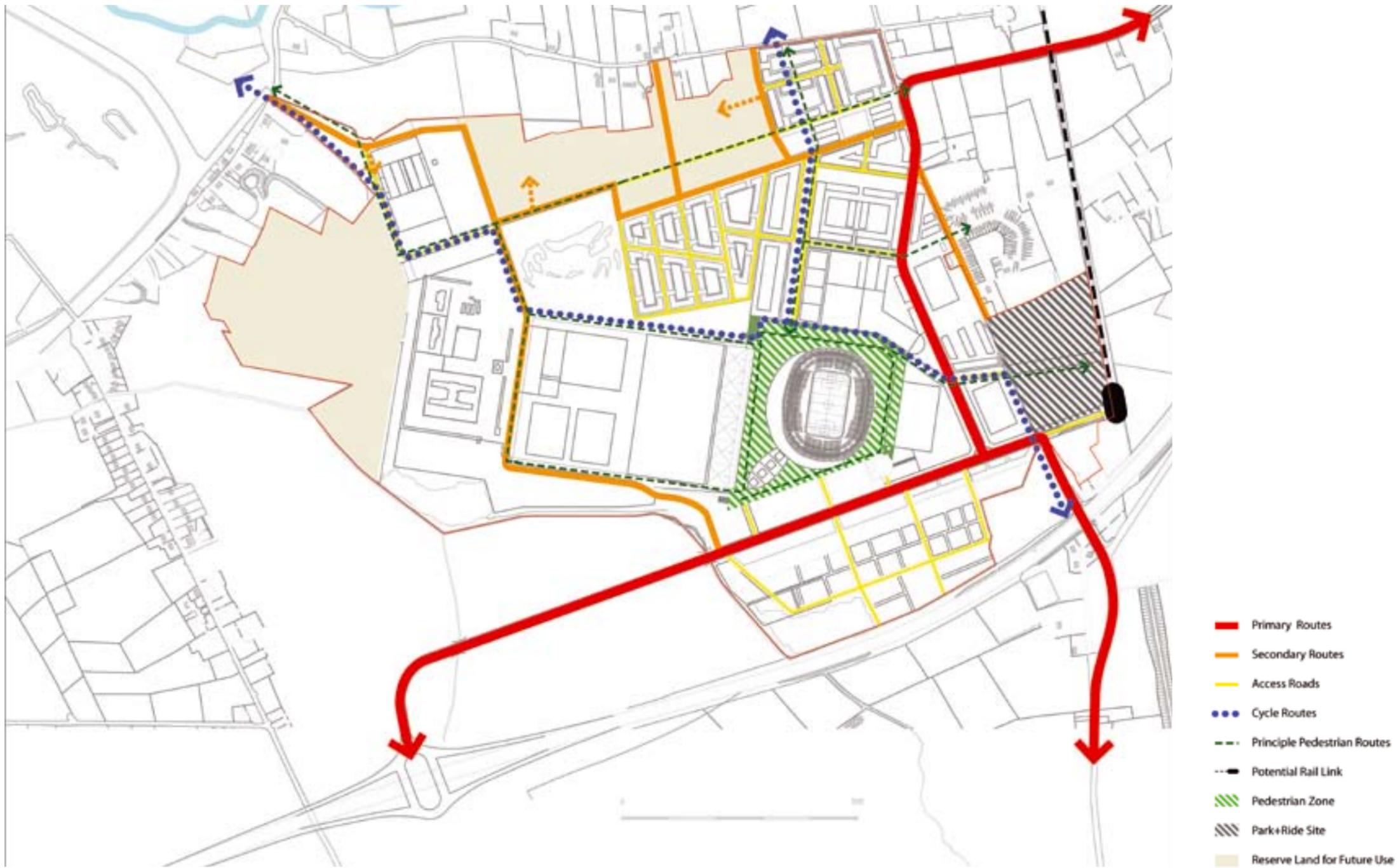


Figure 4.3: Access and Movement

## INFRASTRUCTURE AND SERVICES

- 4.29 The existing utility infrastructure would not have sufficient capacity for the changes proposed at the site. Any new infrastructure required must be capable of construction and operation, while minimising environmental impact, and must meet the needs of the proposed development in a sustainable way.

## WATER SUPPLY

- 4.30 The site is currently supplied through a perimeter ring main, fed from a 150mm diameter public supply from Halftown Road. Substantial leakage on the site is suspected but not proven. Water consumption for the former occupation of the site was estimated at around 80,000 litres per day. The current situation is inadequate for the demands of the proposed development and reinforcement of the supply would be required.
- 4.31 A detailed appraisal study of water and sewerage infrastructure for the area is already being carried out by Water Service and discussions with them have indicated that sufficient water could be supplied to the site by the provision of a new water main from the existing trunk main at Blaris.
- 4.32 There is also the potential to reduce the water demand from the development through water saving measures, such as:
- Recycling of rainwater and grey water;
  - Use of low water consumption devices;
  - Reduced system losses through replacement of the existing water supply network.
- 4.33 The presence of a local aquifer under the site has not been considered for the provision of potable water to the development due to the current experience of Water Service with boreholes which have been phased out due to

economic considerations. However, this would not preclude this option being available for private industry on the site, or for use in the production of renewable energy (ground source heat pumps). Early consultation with Water Service would be required in relation to the water supply to ensure that adequate infrastructure can be in place to sustain the development of the site.

## WASTEWATER

- 4.34 At present, foul drainage from the Maze/Long Kesh site discharges via private pumping stations either into a local septic tank or into the public sewer in Halftown Road which gravitates northwards to the Youngsbridge pumping station adjacent to the River Lagan. From there, wastewater is pumped to the New Holland Wastewater Treatment Works (WwTW), located to the north east of Lisburn.
- 4.35 Water Service is currently carrying out a study into the wastewater infrastructure in the Lisburn area and it has been confirmed that there is insufficient infrastructure through Lisburn or capacity at New Holland WwTW to serve the proposed development at the Maze, therefore sewage treatment facilities would be required on the Maze/Long Kesh site to serve the development. Water Service has proposed that a WwTW be constructed on the site to serve the surrounding area as well as the development. A contribution would be made to the funding of this WwTW for the area which would be comparable to the costs for the construction of a works for the Maze/Long Kesh site alone.
- 4.36 Water Service, through their consultants, has stated that to construct a separate WwTW outside the site would extend the procurement process considerably due to land acquisition and public enquiry issues related to this. This process could take 5-10 years. They believe that these would delay the construction such that wastewater treatment facilities would not be available in time to serve the Maze/Long Kesh site. Therefore the Maze/Long Kesh

development would have to provide its own WwTW to serve the site which would be undesirable.

4.37 Careful consideration has been given to the location of the WwTW to ensure that environmental and visual impacts are minimised. A closed works is proposed in the South-West corner of the site adjacent to the motorway and Employment area. This would minimise the visual impact, keep the cordon sanitaire to a minimum to reduce the impact on the potential development of the site. All the processes associated with WwTW would be covered or underground. The works would consist of a series of single storey structures with a large plan area and flat roofs, with planting and landscaped banks around the perimeter to minimise the visual intrusion. A control room would be required and would comprise a small single storey structure with adjacent parking. The works would be surrounded by a palladin type security fence. The Masterplan allocates an area of 2-3 hectares for the WwTW. This area would be large enough for a works to serve the south and west Lisburn area if the Water Service wished to extend the capacity of the proposed treatment works to serve the wider area.

4.38 In line with the sustainable development objectives, the sewerage infrastructure on the site would utilise storage and overflows where appropriate to attenuate foul drainage flow rates from the site.

**STORMWATER**

4.39 Discharge of surface water from the existing site is via a combination of conventional large diameter piped systems and the extensive use of ground filtration methods. It is understood that the piped storm systems outfall into Newport Drain, a minor undesignated watercourse (number MW 3403) located to the southwest of the site, which flows into the River Lagan immediately west of the Maze racecourse.

4.40 According to the Rivers Agency, there is no history or record of flooding or ponding in any areas of the site. The proposed development presents an excellent opportunity to make use of sustainable drainage systems (SUDS) wherever possible, in line with the government’s policy on sustainable water management, which is intended to ensure that water resources are used efficiently and that the impact of flooding is minimised through an integrated approach. Therefore it is proposed to provide a number of storm water detention ponds in appropriate areas throughout the site to provide storage which would attenuate storm water flows, as well as improving the quality of any discharges to the local watercourse. While the high water table means that infiltration features may not be suitable to provide the necessary attenuation for the site, use can still be made of appropriate features such as piped filter drains and tanked permeable paving which can discharge to the ponds and would provide additional treatment as well as assisting in the attenuation of flows.

4.41 1.5 to 2.5 hectares of ponds are proposed within the landscape areas to provide sufficient attenuation for the fully developed site to ensure that the capacity of the Newport Drain is not exceeded. These ponds would integrate within the parkland area as part of the landscaping and provide landscape features and opportunities for recreational use..

4.42 Any discharge to the nearby watercourse would require Stormwater Discharge Consent from both the Environment and Heritage Service in terms of water quality and Rivers Agency in terms of flow volumes. The application of SUDS principals is proposed to facilitate this process.

4.43 Water run-off from main site buildings should be collected and re-used for toilet cisterns and provision made for this in design.

**ELECTRICITY SUPPLY**

4.44 At present, the site is supplied with electrical power by Northern Ireland Electricity (NIE) through four substations,



fed from an 11 kV supply, from the Sprucefield 33kV/11kV grid station about 2.5 km east of the site.

- 4.45 It is estimated that the development of Maze/Long Kesh site could result in a power demand for 15 MW. Whilst some spare capacity is available to serve the proposed development, additional capacity would be required through the life of the redevelopment.
- 4.46 The preferred option to provide electricity supply to the site would be from the Lisburn Main 110/33kV substation, which passes about 500m to the east of the site. The Sprucefield 33/11 kV grid station has an existing firm capacity of 20 MVA and an existing load of 12 MVA. Therefore 8 MVA spare capacity is available in the area. However, the fully developed sites require 17 MVA, therefore this spare capacity is insufficient for the long term. (Note that the power demand of the development is 15 MW, which converts to approximately 17 MVA (the conversion factor, or power factor, depends on the type of demand within the site and is typically 0.9). The Lisburn Main 110/33 kV substation has 57 MVA spare capacity, and therefore will be able to supply the development. This will require some alterations to transformers in the network and the construction of a new 33/11 kV substation and associated cabling for the site.
- 4.47 The estimated cost of the necessary infrastructure works to supply the site from the Lisburn Main substation including the provision of a new substation and reinforcement of the existing supply route is in the region of £2.5 million. The planning and implementation of any upgrade to main NIE substations and/or supply network will take 15-18 months minimum.
- 4.48 The use of renewable energy technologies would not affect the overall power demand associated with the development of the site and would not affect the requirement for infrastructure to be provided to supply the site. However, over time the use

of conventional electricity could be reduced. The potential for the incorporation of renewable energy technologies is examined in further detail in Section 6.

### OPEN SPACE AND PUBLIC REALM NETWORK

- 4.49 A high quality public realm is essential to the creation of a successful destination and an attractive environment to work, live and visit. The Masterplan is based on a clear open space and public realm framework which would provide a setting for the proposed development. The open space and public realm framework is illustrated in Figure 5.3. Two principal public spaces are proposed:

- Central public precinct around the stadium, exhibition halls and leisure facilities - this would create a strong focus for the development and give the site a clear identity. It would provide circulation space on event days and an active space for celebrations and outdoor events.
- Central Park - a large area of landscaped parkland containing wetland and water areas to assist in the implementation of sustainable drainage measures. These would add to the amenity value of the site and may provide the opportunity for water based leisure activities. A venue for informal recreation and use in association with the showgrounds for events such as the Balmoral Show. The park would provide an important amenity space for residents and an attraction to visitors with green links to the Lagan Valley. It would also provide an attractive setting for the listed structures and buildings. The creation of a high quality parkland setting is considered to be an essential element in creating a strong destination on the site and an attractive living environment.





Figure 4.4: Open Space and Public Realm

## LANDSCAPE STRUCTURE

- 4.50 The redevelopment of the site creates the opportunity to integrate design elements that would help to ensure the site sits more comfortably within the surrounding rural landscape. The proposed landscape structure seeks to recreate key elements of the rural landscape with landscape features potentially incorporated into corridors and swathes of open space within the built form. This would integrate the site with the local landscape.
- 4.51 A particular objective of the landscape strategy would be to minimise impacts of development on the landscape and existing views. Existing trees would be retained and structural landscaping around the boundary of the site would be enhanced with the planting of appropriate indigenous species.
- 4.52 The landscape structure has been influenced by the historic development of the site including the former runway. A central green spine is proposed along the route of the former runway as a focus for new development.
- 4.53 Existing vegetation would be retained and indigenous species would be used to maintain local landscape character.
- 4.54 A network of public spaces and squares would be provided throughout the development to create a high quality streetscape and a vibrant atmosphere. These spaces would provide informal seating areas, incidental play areas, safe footpath and cycle routes and visual amenity. Neighbourhood parks would be a feature of the development and would make provision for casual leisure and recreation use.
- 4.55 As part of a sustainable drainage system (SUDS), an area of wetlands would be created in the park. This would provide a range of habitats which would add visual interest and increase habitat diversity on the site.

- 4.56 As part of the renewable energy strategy for the site, part of the landscaped areas in association with other areas off-site would be utilised for bio-mass production through the production of willow and miscanthus. This may be linked to a sustainable living centre in the Rural Excellence and Innovation Zone comprising the Exhibition Halls, Showgrounds and Equestrian Centre.

## LINK TO THE LAGAN NAVIGATION

- 4.57 The Masterplan seeks to create physical and visual links to the Lagan River. At minimum this might allow for pedestrian access from the site to the river.
- 4.58 Whilst subject to issues of need, value for money and affordability, Lisburn City Council advocates the long term potential connection of the Lagan Navigation to the Maze/Long Kesh. This would provide the opportunity to further enhance the network of open spaces and public realm and to develop water-based tourism and infrastructure improvements.
- 4.59 The proposed re-opening of the Lagan Navigation forms an important part of Lisburn City Council's Strategic Vision for the regeneration of the River Lagan and would link Belfast and Lisburn through to Loch Neagh. Linking the river with the Maze/Long Kesh site could provide a water-based network of regional significance and could offer associated economic, environmental and social benefits.
- 4.60 A feasibility study is currently being undertaken on behalf of Lisburn City Council. The proposed works would include the construction of new locks, weirs, a new bridge, modifications to existing bridges, restoration of an existing lock, improvements of the river channel, extended towpath and the construction of a new canal section.
- 4.61 The Masterplan provides the opportunity to link the Maze/Long Kesh site to the Lagan Navigation subject to technical



and economic feasibility. The waterway link would provide an attractive setting for waterside development and areas of high quality public realm. A potential route is illustrated in Figure 5.4.

**PUBLIC ART**

4.62 Public art would be promoted in public spaces to add to the distinctiveness and identity of the site. This may include the imaginative use of lighting, paving and sculpture and the introduction of water features. This could include the creation of a sculpture trail through the site.

**ZONES OF ACTIVITY**

4.63 The Masterplan comprises a number of distinctive but well connected and interrelated zones of activity. These comprise the following:

- Multi-sports Stadium and Sports Zone
- International Centre for Conflict Transformation and Heritage Zone
- Employment Zone
- Rural Excellence and Innovation Zone including Exhibition Halls, Showgrounds and Equestrian Centre
- Leisure/Entertainment Zone
- Community Zone
- Residential Zone



## THE MULTI-SPORTS STADIUM AND SPORTS ZONE

- 4.64 The Sports Zone would contain a range of facilities and opportunities for the promotion and enjoyment of sports by the whole community. The Masterplan demonstrates how a new focus for sport could be developed as part of the comprehensive redevelopment of the site.
- 4.65 The site provides the opportunity for the development of a strong public focus to be developed around the stadium

and exhibition centre which would enhance the setting and operation of the stadium as well as providing a very distinctive landmark. It is proposed that the stadium would be located on a podium with underground parking and service areas and a large public space which would link the various sports and leisure facilities in a traffic free environment. The podium would become a pedestrian precinct and the focus for leisure activities on the site. It would be used as outdoor events space during major events. The objective would be to secure year round activity through the promotion of a range of activities and the creation of an attractive destination for visitors.

- 4.66 Figure 4.5 illustrates how the podium would operate. It would provide underground parking for 1500 cars and underground servicing for the stadium, exhibition halls and arena. This arrangement has a number of benefits. The podium would provide a large traffic free circulation space which can be shared by the adjacent uses and accommodate a range of events associated with the use of the exhibition halls, arena and stadium. It also allows for service access and parking to be rationalised and facilitates the shared use of facilities.



Image: HOK Sport

### MULTI-SPORTS STADIUM

- 4.67 The focus of the Sports Zone is a multi-sports stadium. The stadium would accommodate facilities for the three sports associations- Gaelic Athletic Association (GAA), Rugby and Football.
- 4.68 The development of the stadium provides the opportunity to participate in the 2012 Olympic and Paralympic Games provided that the stadium is completed by 2011 to allow for test events in advance of the Games. The potential to host a small number of preliminary matches as part of the Olympic Football Tournament is being actively considered.
- 4.69 Although the Stadium Business Plan is an iterative process involving on-going discussions between the Department of Culture and Leisure (DCAL)/ Strategic Investment Board (SIB) and the key sporting stakeholders, it is currently forecast that the Stadium would hold at a minimum between 22-24 events per annum by the three sports and concert promoters, attracting a range of likely attendances between 15,000-42,000.
- 4.70 The stadium has a minimum capacity of 42,000 spectators with potential to increase capacity in the future. Subject to a design solution that meets the needs of all three sports, the provision of a lower bowl area with a capacity of some 20-27,000 and two upper side tiers would allow the stadium to function with a smaller capacity for some events. Two additional upper tiers could be added in the future, one at either end, to increase capacity of the stadium further if demand required it.
- 4.71 The stadium would use high quality innovative design to create a landmark stadium whilst also maximising value for money. It accommodates:
  - A GAA size pitch which can be used by the three sports associations at all levels of competition;
  - First class spectator facilities including optimum viewing areas and goal-end quality sight lines.



Figure 4.5: Stadium and Sports Zone

4.72 The stadium would, however, be more than just a sports stadium hosting a limited number of events each year. It would also provide a range of other facilities and multi-functional space. This would include:

- A hotel with conference and banqueting facilities. The stadium and exhibition facility provide a unique opportunity for a hotel and conference facility which will serve a range of functions and events on the site;
- New office space which would be available for use by occupiers such as the Sports Council and for the centralisation of sports administrative bodies;
- Community sports and training facilities which would be available to the public.

4.73 The stadium would be the focus of year round activity. It would be linked with the multi-purpose arena, exhibition centre, equestrian centre and outdoor sports facilities by a network of pedestrian and cycle links and outdoor activity spaces.

4.74 The Masterplan includes the provision of training pitches for use by the sporting bodies and the community. These could include all weather / astroturf surface pitches and generation three pitches with floodlighting.

4.75 There are a number of similar stadiums in the UK and overseas to that proposed at the Maze/Long Kesh which have successfully combined the use of the stadium for sports events with other sporting, community and commercial uses. Examples include the Reebok Stadium, Bolton and the Galpharm stadium, Huddersfield, where traditional stadium uses have been successfully combined with a range of other activities including a hotel, conference facilities and community uses. The community use of stadium facilities is becoming increasingly important. For example, the Government in partnership with football clubs, Local education Authorities and Businesses has started to establish out of hours learning centres at football clubs nationwide. Both the City of Manchester Stadium and

Kingston Communications Stadium are other good examples of where community uses have been incorporated into the Stadium design.

4.76 The out of town Reebok stadium in Horwich, situated at Junction 6 of M61 about 6 miles South of Bolton Town Centre, provides a regional sports and leisure facility for the North West of England. Each stand comprises two tiers, the lower forming a full bowl. Internally, continuous concourses and corridor links at all levels provide circulation around the entire stadium for staff and spectators when appropriate. This allows for easier stadium management and access for building users to a greater number and variety of concessions and attractions once inside the stadium. Spectator facilities include private and club hospitality suites, a crèche/nursery and medical facilities. The Reebok Stadium has been very successful in attracting a myriad of patrons, by introducing into the complex a number of other facilities, also capable of generating alternative forms of revenue. Integrated in the stadium is a hotel, which is attached to the main stand. The private boxes can also be converted into hotel rooms. This is a very inexpensive exchange, and its success is dependent on a clever design, where stadium boxes are able to convert to a hotel room very quickly. The Stadium also includes a restaurant and shops, meaning patrons are surrounded by a lively and active environment which helps to generate revenue. Facilities are available for conferences and meetings which prove very successful in generating funds.

4.77 The Reebok Stadium also includes a range of the types of community facilities likely to appear within the Multi-Sports Stadium at Maze/Long Kesh. "Study@BWFC" is an out of hours study centre which young people aged 10-14 from schools all over Bolton attend on a voluntary basis. The centre aims to provide a programme of activities that complement the work of schools in raising achievement in literacy, numeracy and ICT in addition to team building and sports related activities based on the principles of 'accelerated learning'. Sessions are free and transport is provided. The learning programme and facilities are

distinctively different to school and include opportunities to learn from players and to use the Reebok Stadium to improve the skills of young people in many subject areas.

4.78 The study centre facilities include networked multi-media PCs, internet connection, video-conferencing facilities, integrated learning system, on-site technical support, a modern spacious environment and 'chill out' zone, large screen cinema and auditorium and library. The centre has two trained teachers who are supported during sessions by learning mentors from local Colleges and Universities. Volunteers from local schools act as Peer Mentors. The study centre also offers programmes for schools and community groups.

4.79 The Reebok Stadium also offers a Football in the Community Scheme which includes in-term coaching, after school

courses, holiday courses and match day experiences and coaching for specific groups such as people with special needs, the disadvantaged and girls only sessions. In 2005, almost 20,000 children and adults experienced the benefits of Bolton Wanderers' Football in the Community scheme. The stadium operates an English Language and Culture Football Training Camp in the summer (EduKick England).

4.80 The Benfica Stadium in Portugal is a 65,000 seated stadium comprising a football stadium with integral museum, health and fitness club, administration offices and themed restaurant areas. The new Benfica club megastore with a sports and leisure club is accommodated in an adjacent linked development similar to the plans for the Maze Long Kesh Stadium. The new Benfica stadium was designed to incorporate a range of facilities that can be used both by the club and local community

on non-match days – bringing life to the area throughout the week. The design solution was instrumental in the creation of a visible landmark and individual identity of the stadium.

4.81 The Benfica stadium has been built to serve the community. The site is open year-round, some parts 24 hours a day, and includes shops, bars, restaurants, a health club and facilities for Benfica's other sports teams, including basketball and volleyball. Two levels of a large restaurant overlook the pitch. There are 1,400 car parking spaces in a three-storey underground car park, a megastore and a freestanding sports complex, including a 3,500 seat indoor arena.

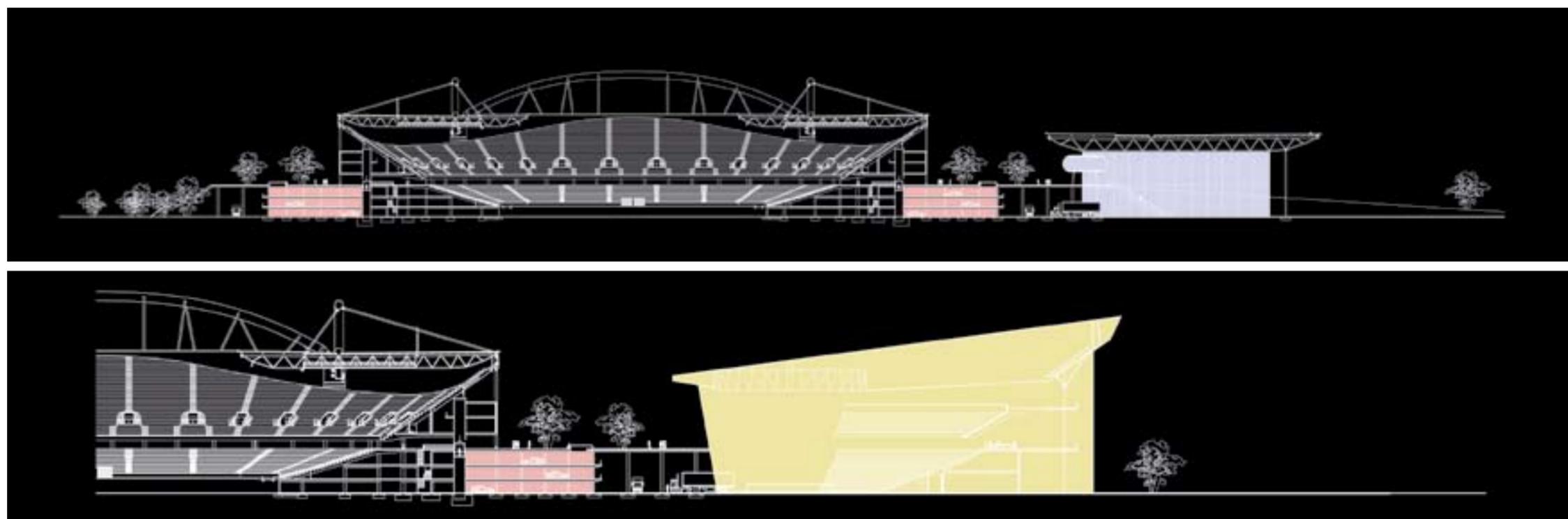


Figure 4.6: Open Space and Public Realm



## ARENA

- 4.82 The sports zone also includes the potential for a multi-purpose indoor arena with a capacity for up to 3,000 spectators. This facility would complement the larger facility provided by the Odyssey Arena and could be suitable for culture, sport or leisure use such as basketball and concerts. It would also be possible to use the arena as an ice rink to host ice hockey or general skating. The arena could be used in conjunction with the stadium and exhibition halls and during large events such as the Royal Agricultural Show.
- 4.83 The sports zone would include outdoor training pitches including floodlit all weather pitches that would be available for community use.

## SPORT FOR ALL

- 4.84 The objective is to maximise the potential to accommodate a broad range of sporting activities that would encourage sporting participation from the entire community. An ethos of access for all would provide facilities for people of all ages, religion, gender, culture and levels of physical ability and disability.
- 4.85 A high quality of facility would be promoted to raise the profile of the site in terms of developing reputation and pride.
- 4.86 In addition to regionally important facilities, the Masterplan includes a significant opportunity for community sports activity and informal recreation. This would help fulfil the needs of young people and promote school and community use of facilities.

## STADIUM PARKING

- 4.87 An underlying principle of the Masterplan is to maximise the potential for shared parking and to promote the use of public transport.
- 4.88 Large stadium events would give rise to maximum parking requirements on the site. Based on current parking standards of 1 space/ 3 seats, up to 14,000 spaces would be required to meet the needs of the stadium but with the potential for this figure to be reduced if measures to encourage bus, coach and rail travel have been demonstrated to be effective. This is a key objective of the Transport Strategy which is set out in Section 6, and a core sustainability aim.
- 4.89 The parking strategy is therefore based on the following principles:
- An element of permanent parking to be provided in Phase 1 with the balance in temporary surface car parks on undeveloped parts of the site;
  - Temporary parking for the stadium to be provided on part of the future showgrounds
  - Temporary parking to be replaced as required as site develops;
  - Shared use of parking in employment areas to be secured for stadium use through agreement with developers
- 4.90 The Phase 1 development (pre-2012) includes the following parking provision:
- Podium - 1500 spaces
  - Permanent surface parking - 2000 spaces
  - Temporary surface parking adjacent to stadium - 1000 spaces
  - Park and Ride - 2000 spaces
  - Use of showgrounds and open space - 2500 spaces (stadium peak days only)

- Temporary surface parking on undeveloped parts of site- 5000 spaces

4.92 The Phase 1 parking arrangements are illustrated in Figure 4.8.

4.92 With the full development of the site, temporary parking would be replaced by shared use of parking in the commercial/ employment/exhibition zones. The following provision is proposed:

- Podium - 1500 spaces
- Permanent surface parking - 1000 spaces
- Replacement of surface parking adjacent to stadium with multi-storey car park (3300 spaces)
- Park and Ride - 2000 spaces
- Use of showgrounds and open space- 2500 spaces (stadium peak days only)
- Shared parking in business/commercial areas- 2500 spaces
- Coach parking - Provision for coach parking within Park and Ride site.

4.93 It is assumed that some reduction in the level of parking provision required to serve the stadium would be permitted in the longer term subject to the successful implementation of the Transport Strategy. The level of provision shown in Figure 4.9 represents a 10% reduction in the original parking provision ie spaces for some 12,800 cars. This represents an assumption of 90% car usage. The Government's aim, for value, sustainability, and freedom of access reasons, should be to significantly improve upon this figure. Subject to the effects of measures to promote public transport use, the level of parking provision could potentially be further reduced. In practice, this could obviate the requirement for construction of a multi-storey car park with consequent benefits in terms of a reduction in construction costs.

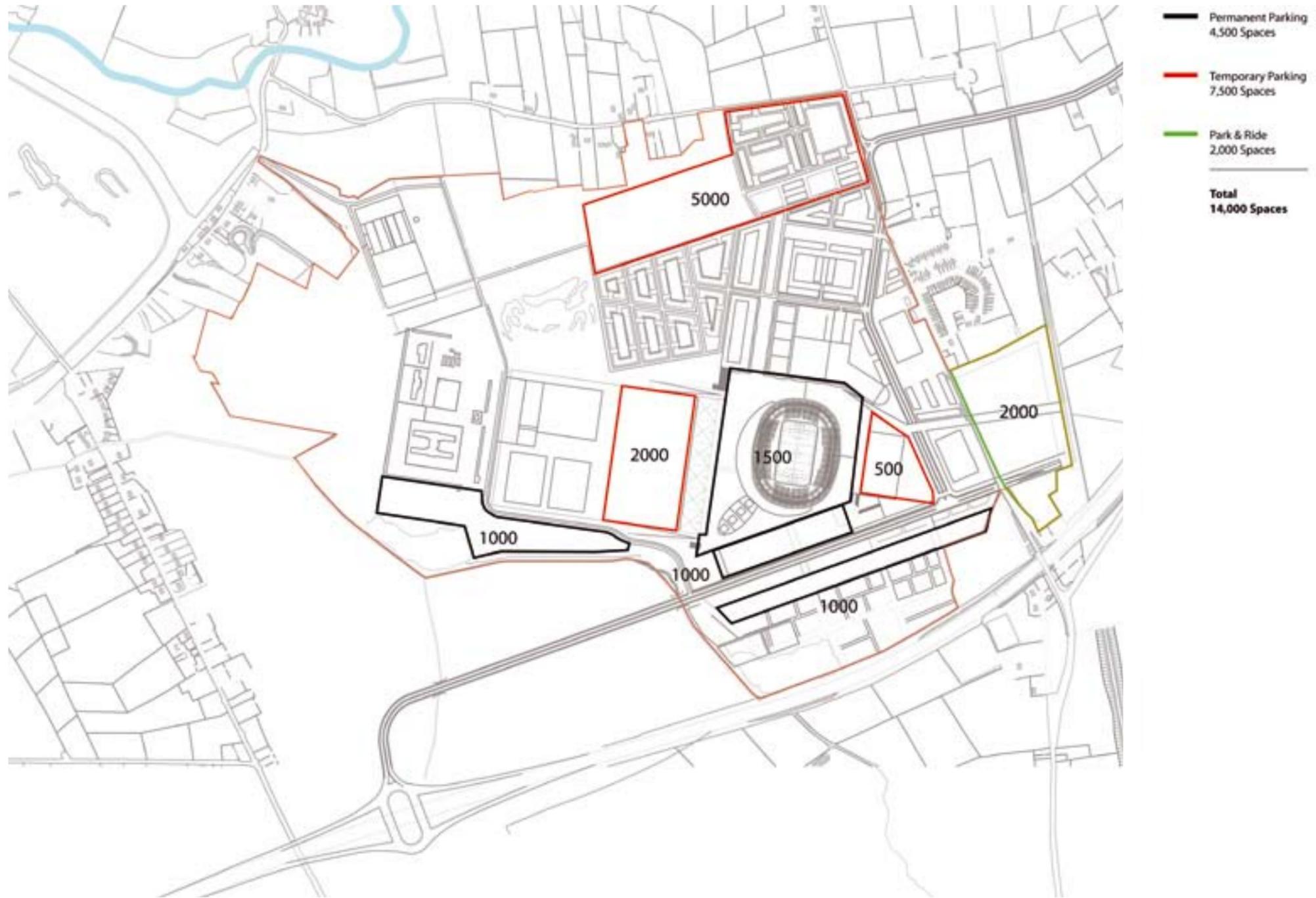


Figure 4.7: Phase 1 Parking

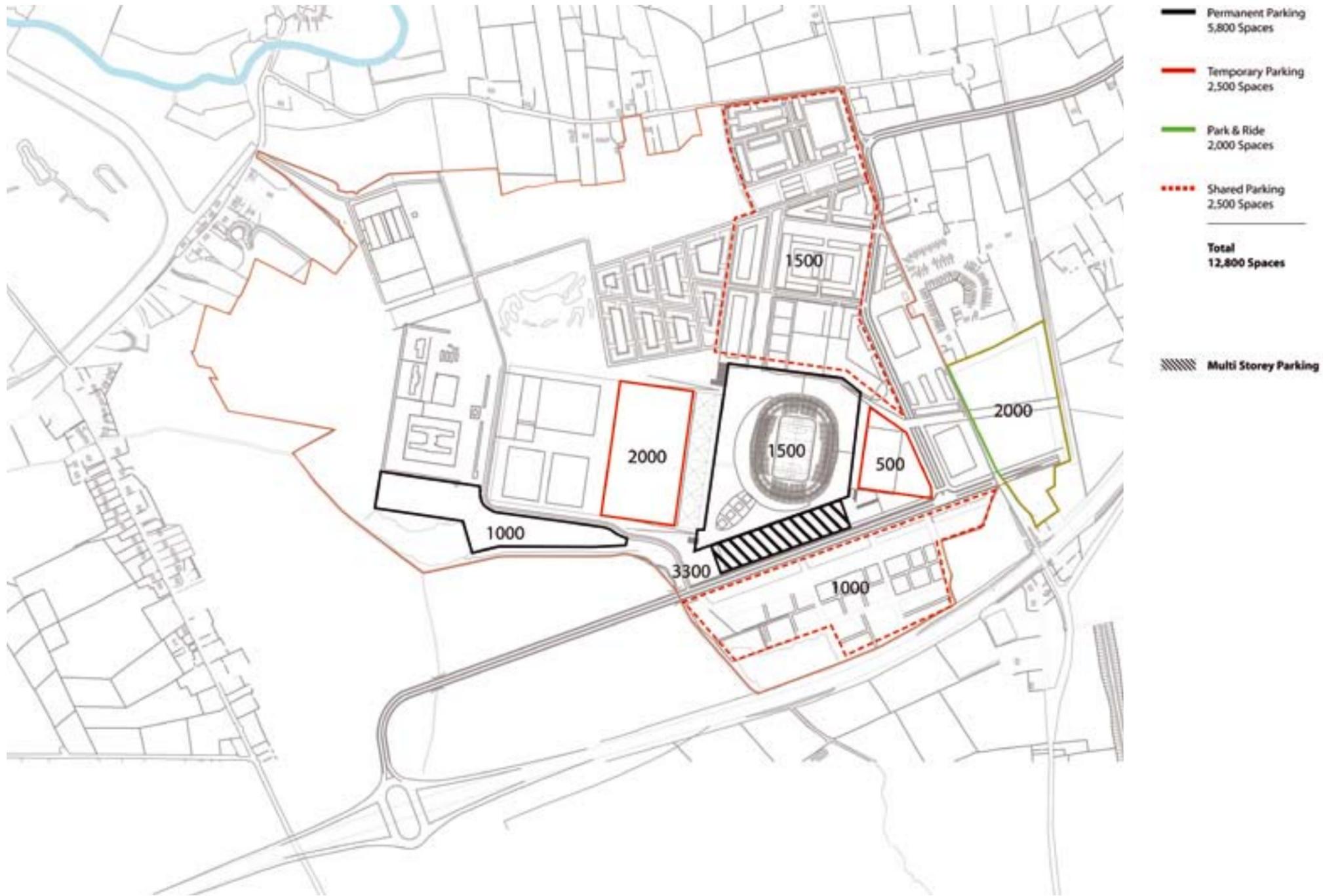


Figure 4.8: Phase 2 Parking

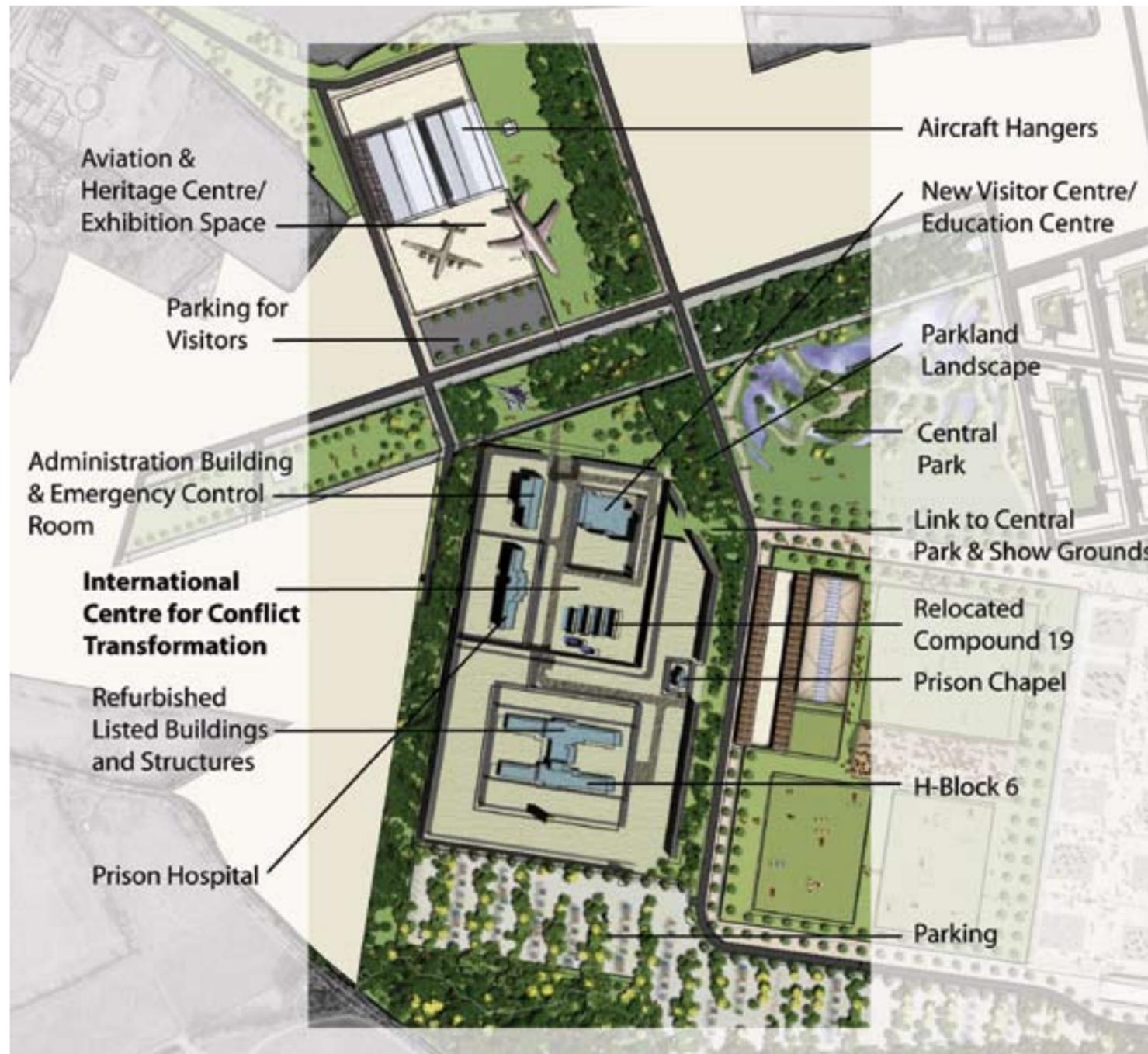


Figure 4.9: International Centre for Conflict Transformation and Precinct including Listed Prison Buildings and Structures

## INTERNATIONAL CENTRE FOR CONFLICT TRANSFORMATION

### The Maze Consultation Panel Report

4.94 The cross-party Maze Consultation Panel concluded that it would be entirely fitting for the Maze/Long Kesh site, which was for so long a symbol of conflict, to become a symbol of the ongoing transformation from conflict to peace. They believed that the site would be an ideal location for an International Centre for Conflict Transformation and as such had the potential to play an important part in promoting a shared society.

4.95 Such a facility would not focus solely on the Northern Ireland conflict, but could play a key role internationally; supporting the processes of transition from conflict to peace, and of dealing with diversity. Many organisations in Northern Ireland, not least the two Universities, are already active in this field; working with organisations in regions as far apart as southern Africa, the middle east, the Balkans, and the Basque region. The new Centre would provide a facility to build and develop this work, with the aim of establishing an international centre of excellence, linked to similar centres throughout the world. The development of an International Centre for Conflict Transformation would therefore, in the Panel's view, add considerably to the synergy of the other proposed developments, and help to establish the international profile and identity of the Maze/Long Kesh.

4.96 In addition to its international focus, the Panel envisaged the Centre playing an important role in Northern Ireland, providing a facility that would support and facilitate the ongoing processes of dialogue and building trust and confidence within and between communities, and to allow others to learn from the problems Northern Ireland has experienced, and how we are seeking to resolve them. The facility would be a neutral, inclusive and constructive 'place apart', to be used by organisations and communities to further the cause of conflict transformation.

4.97 The development of an International Centre for Conflict Transformation would provide a high quality facility, which the Panel believed was currently lacking. They concluded that the Centre has the potential to play an important part in promoting an understanding of the conflict. Much could be achieved in terms of educating visitors to the Centre as well as promoting peace and reconciliation.

4.98 It was clear to the Panel that much good work on conflict transformation is taking place within and between communities in Northern Ireland. It is equally clear that much remains to be done, and that there is strong support from a range of community and practitioner organisations for a facility of the type proposed to support this process. The proposal offers an opportunity for a new and unique facility, bringing together communities, practitioners, academics and international partners in a way that will make a practical contribution, and with the potential to be of international significance. To be successful, it will be essential for the facility to be genuinely neutral and inclusive. This should seek to ensure that it is not perceived as being owned by any one section of society.

- 4.99 The Panel recommended that the Centre will include:
- a neutral venue for facilitated dialogue, with residential and meeting facilities;
  - a shared location for practitioners working in this field, possibly including offices for organisations to base themselves on an outreach or permanent basis;
  - an archive and research facility for good practice in conflict resolution and transformation; and
  - a link or outreach facility for Northern Ireland's two Universities, with links to other international centres of excellence, such as the Kennedy Centre at Harvard University, Boston College and Austria's Schaining Burg.

4.100 The work of the International Centre could be facilitated positively by being located beside the preserved prison

buildings. Since part of the purpose of the Centre would be to acknowledge and learn from the past whilst looking forward to and building for the future, it would be fitting to do so in a setting that played a major role in the conflict.

4.101 Straightforward factual information should be available on-site about the history of the site, from the pre-war days through World War II, the Troubles and to the present day, for those using the International Centre for Conflict Transformation and those wishing to visit either the Centre or the preserved prison buildings. In line with the overall function of the International Centre for Conflict Transformation, such information must be inclusive and not perceived as being the exclusive view of any one section of society.

**BUSINESS PLAN FOR THE INTERNATIONAL CENTRE FOR CONFLICT TRANSFORMATION**

4.102 Details of the International Centre for Conflict Transformation are the subject of on-going business plan work with the key stakeholders. For the purpose of Masterplan development, it is assumed that the Centre would be focused on the listed prison structures and involve the appropriate reuse of these buildings. A key requirement would be the creation of an appropriate setting for the facility and the control of adjacent uses to ensure that these do not impact on the functions of the centre or the historic significance of the prison buildings. There is the potential for synergy with other uses to help to establish the international profile and identity of the Maze/Long Kesh. The highest standards of design and landscaping would be required.

4.103 It is intended that the International Centre for Conflict Transformation would play an important role in the transformation of the region in the period of post-conflict normalisation through promoting a shared society. With links to local universities, and organisations in other parts of the world that have undergone or are going through periods of similar transformation and change, the International Centre



for Conflict Transformation would provide a facility to support and facilitate the ongoing process of dialogue and building trust and confidence within and between communities and allow others to learn from the problems the community has experienced and how these are now being resolved.

- 4.104 The objective of the International Centre for Conflict Transformation is to create a viable and effective Centre within this unique environment where people can learn about managing and transcending conflict. To achieve this overall aim, the Maze Consultation Panel recommended that a new facility should be constructed to the highest architectural standards appropriate to an international centre of expertise. In view of their listed status, the potential for adaptation of the existing prison buildings to provide suitable accommodation for visitor and educational use is limited. In order to provide high quality visitor and educational facilities, a new iconic building is proposed in association with the agreed use of the existing listed prison buildings. Provision should also be made for a phased programme of appropriate maintenance and necessary repair works.
- 4.105 An initial draft business plan has been prepared by OFMDFM and the SIB, and is being discussed with the political parties and relevant key stakeholders from the conflict transformation and related sectors.
- 4.106 The International Centre for Conflict Transformation is focused on the listed structures and involves the appropriate reuse of these buildings. The Masterplan provides a parkland setting for the centre and ensures that other uses would not impact on the functions of the centre or the historic significance of the buildings. There is the potential for synergy with other uses to help to establish the international profile and identity of the Maze/Long Kesh. High standards of design and landscaping would be required.
- 4.107 The Masterplan provides for the reuse of the listed hangars for the display of historic aircraft and exhibition space.

This would allow for the history of the Maze/Long Kesh to be documented from its earliest days as an Airfield and experienced by visitors through the provision of interpretation facilities.

- 4.108 The Ulster Aviation Society requires new premises for the display of its historic aircraft collection and the hangars could provide suitable premises. This could also provide the opportunity for the development of other heritage/cultural facilities on the site. The listed hangars would provide a suitable base for this facility and would allow for future expansion of the collection and permanent displays and interpretation facilities. Access to the hangars and exhibits could be an inherent part of the International Centre for Conflict Transformation facilities.
- 4.109 Whilst proposals for the International Centre for Conflict Transformation are being developed separately by OFMDFM and SIB, there are a number of international examples of similar centres which may provide elements of a suitable model or principle upon which to develop a unique international facility at the Maze/Long Kesh.

### **THE EXHIBITION HALLS AND SHOWGROUNDS/ EQUESTRIAN ZONE**

- 4.110 Although clearly still at the stage of preliminary discussions, with detailed appraisals yet to be completed and final decisions yet to be taken, any potential relocation of the RUAS from Balmoral would be dependent on the re-provision of suitable facilities including new exhibition halls and other external issues. A requirement for a minimum of 10,000 sq m flexible exhibition space has been identified. There is potential for synergy with other uses and potential for the multi-use of facilities (eg: parking, stabling and events space) to create year round activity on the site. A requirement for a total area of 23.2 hectares has been identified with access to 7000 parking spaces elsewhere on the site. This does not take into account the potential for sharing of facilities with other users, notably any potential Equestrian Centre and Stadium.



- 4.111 The Masterplan makes provision for the full range of facilities required for the potential relocation of the existing showgrounds and a modern regional exhibition facility of international standard. It does, however, assume that facilities would wherever practical be shared with other occupiers and this would allow for a more efficient utilisation of land and enable the facilities to be accommodated in a smaller area. The showground facilities are summarised in Table 4.3.
- 4.112 The Exhibition Halls would be accessed by pedestrians from the podium level and served by shared service areas at the lower level below the podium. The Exhibition Halls would be of modular construction to allow for expansion over time and to provide maximum flexibility in relation to size of events that can be accommodated. The Halls would open out onto the showgrounds to allow for open exhibitions and integrated use during other events. The Exhibition Halls would share catering and function space with the stadium and arena.
- 4.113 In association with the exhibition halls, there may be the opportunity to develop a rural excellence or sustainable living centre which could provide a visitor attraction and showcase for farming and sustainable activities such as biomass farming.
- 4.114 The potential location of the showgrounds would also allow ancillary spaces on the podium and within parkland to be used to accommodate maximum exhibition requirements. This would ensure the most efficient use of space within the site.
- 4.115 An equestrian strategy is currently being developed (facilitated by the Department of Agriculture and Rural Development) which has highlighted the potential for a new equestrian centre of international standard. The potential showgrounds could also include the provision of equestrian facilities which again, subject to detailed appraisal and any final decisions, could be used as a permanent equine centre. This would avoid duplication of facilities and ensure

year-round use and activity on the site. It is proposed that any equestrian facilities could be linked to the Down Royal Race Course and Lagan Valley by a network of trails.

- 4.116 The Masterplan has the potential to provide a multi-functional equestrian facility including:
  - Facilities of appropriate standard/dimensions to stage international competitions;
  - Adequate parking to cater for spectators cars and horse trailers;
  - Stabling;
  - Minimum of two arenas (possibly an all-weather sand arena and an all-weather grass arena- one to warm up in and one to compete in or to run different aspects of one competition);
  - An indoor venue that can be used for other non-equine purposes;
  - Facilities for show jumping and dressage;
  - Education and training facilities;
  - A club house/restaurant
  - Potential for use of facilities in association with other activities and functions.



Section	Detail
Equine	Loose boxes, judging rings, arenas with spectator grandstand, space for horse box parking and exhibitors caravans
Sheep/ Goats/ Pigs	Covered accommodation and service areas for penning of animals, shearing stand and spectator accommodation and space for lorries/ trailers and exhibitors caravans
Cattle	Covered accommodation and service areas for cattle entries, judging rings, space for cattle lorries and exhibitors caravans
Exhibition Hall Complex	Exhibition halls with concourse and space for expansion
Maintenance/ Equipment	Engineering/ joinery maintenance area, covered accommodation for grounds staff and equipment
Entrance/ Members	Facilities for members, turnstiles, toilets, cloakrooms and offices
Outdoor Exhibition Area	Hard standing for outdoor stands

Table 4.2: Showground Facilities



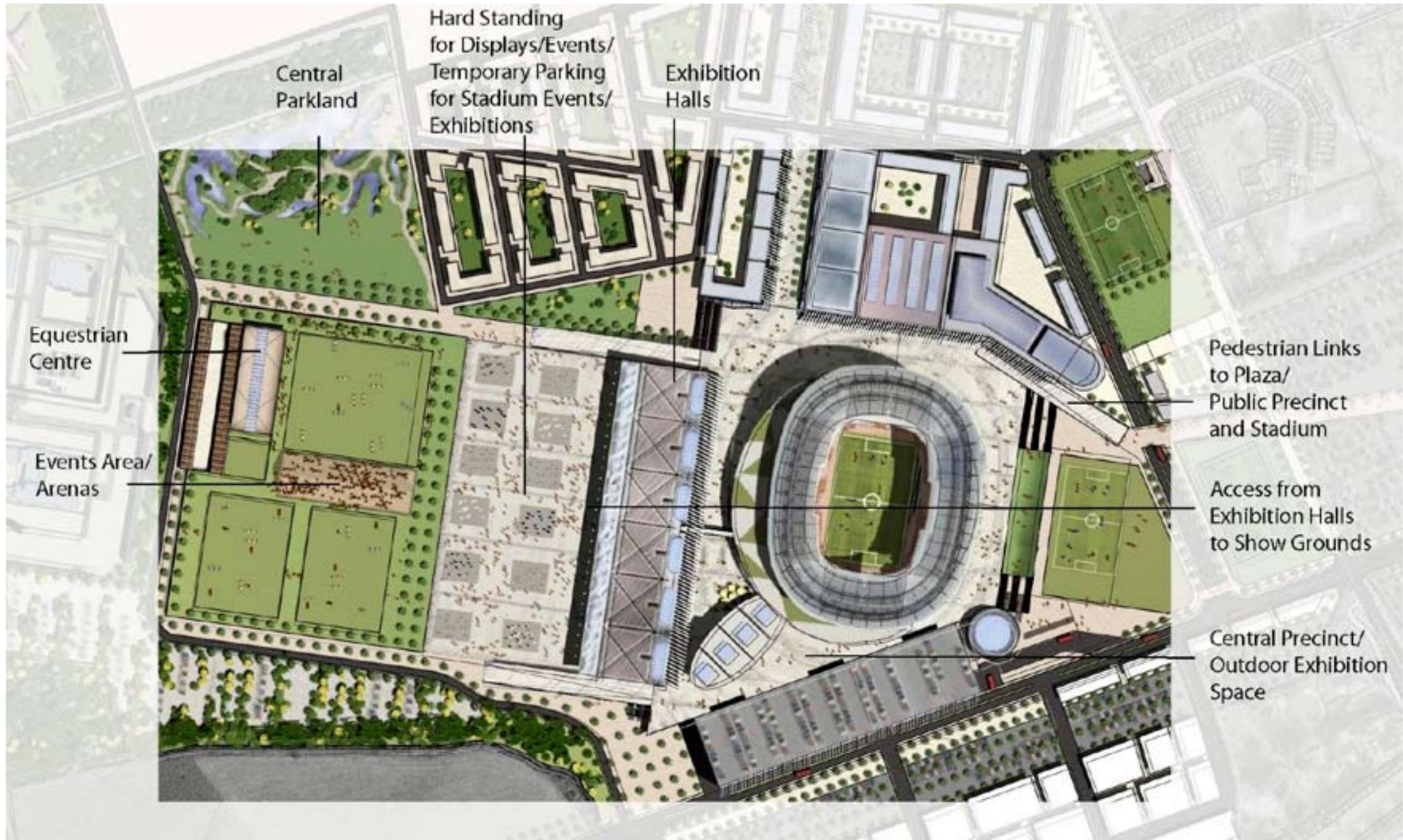


Figure 4.10: Rural Excellence and Innovation Zone

### LEISURE/ENTERTAINMENT ZONE

- 4.117 These uses provide the potential to establish a vibrant entertainment and leisure heart for the site and to provide new employment opportunities in a high quality environment.
- 4.118 The development of leisure and entertainment uses should maximise synergies with other visitor attractions through the sharing of facilities such as parking and catering and co-location to create a dynamic focus for the site which would be active throughout the day and year. The facilities should also enhance the match-day experience for spectators at Stadium events.
- 4.119 Leisure and entertainment uses would be grouped around the podium to create a focus of public activity and synergy of uses. In addition to bars, cafés and restaurants, the Masterplan can accommodate a range of uses such as a multiplex cinema, bowling alley, skating rink in a series of multi-functional buildings linked by pedestrian routes with associated catering facilities and small scale specialist retail units.
- 4.120 The area would include a network of high quality civic spaces linked to the podium to create an attractive environment and setting for activities. These spaces may be used for a variety of activities including specialist markets, performance space and a winter skating rink.



Figure 4.11: Leisure / Entertainment Zone

## EMPLOYMENT AREA

- 4.121 Employment development would assist in the promotion of social and economic regeneration and take advantage of the good strategic location and new transport infrastructure. However, development must be considered in relation to other regeneration objectives and economic development policies.
- 4.122 There is the potential for a range of employment uses but particular priority would be placed on attracting activities of regional significance. Invest NI have indicated interest as a potential strategic development site for their enterprise partners. The development should seek to attract foreign direct investment (FDI) and to meet the need of indigenous business. The opportunities presented by the Maze/Long Kesh should not be restricted to Invest NI or its enterprise partners but rather left open for a range of suitable projects.
- 4.123 Employment development will be phased over time. Taking into account current market trends and the availability of other strategic employment sites, it is considered at the present time that the employment development will continue in the post 2015 period.
- 4.124 Employment uses will comprise Class B1: Business and Class B2: Light Industry. Larger light industrial uses are proposed adjacent to the motorway to minimise impacts on amenity.

Other light industrial uses are proposed on the northern part of the site adjacent to the Blaris Road.

- 4.125 The Masterplan provides a range of employment/business space. The area to the south of the stadium immediately adjacent to the Motorway is identified for larger employment uses including light industry and logistics. This provides a good location for larger scale industrial operations given the proximity to the motorway junction and would remove heavier vehicular traffic from the rest of the site.
- 4.126 The office/business area located to the north of the stadium would be a high quality development incorporating a range of business space and opportunities in a high quality setting. The buildings would be arranged around a series of squares to create an attractive working environment.
- 4.127 The Masterplan makes provision for strategic site infrastructure and serviced employment land will be made available for disposal and development.
- 4.128 The site may offer particular potential for the development of business in the sports related sector including related goods and services.
- 4.129 The development of a strong economic base would contribute to regional development objectives and provide the opportunity for employment development on a regionally significant scale.





Figure 4.12: Employment Zone



**RESIDENTIAL**

- 4.130 In accordance with the proposed Masterplan approach,, residential development of 200 dwellings is proposed in the period up to 2015. Any consideration of the potential or otherwise for further residential development would be subject to plan review. Note the statement on Planning in Chapter 2.
- 4.131 The creation of a sustainable residential community on the site would have a number of benefits in terms of supporting other community facilities and promoting more sustainable and healthy lifestyles with access to employment and leisure.
- 4.132 A high quality of development is proposed with a range of housing types and sizes from apartments to family housing. The residential development would be supported by community facilities such as children’s play areas, open space, medical facilities and local shops.
- 4.133 The objective would be to create a sense of community and a unique living environment with a high quality of open space, access to the countryside and exemplar leisure facilities.



- 4.134 The residential development would incorporate an element of integrated housing and social housing to promote the strategic objectives relating to equality and inclusiveness.
- 4.135 The density of development would be dependent on the unit mix but is expected to be within the range of 35-50 dwellings per hectare.
- 4.136 The Masterplan provides a living environment which would include a series of distinctive character areas. Provision would be made for community facilities in a local centre developed around a village square to serve the needs of the community. The proximity to sporting facilities and access to the countryside provides the opportunity for the development of a unique sports-led lifestyle community and the promotion of healthy living objectives.
- 4.137 Examples of sustainable communities include Poundbury in Dorset and Greenwich Millennium Village. These developments are characterised by their sense of community, the quality of architecture and sustainable construction methods, the provision of community facilities and mix of uses which promote more sustainable lifestyles.





Figure 4.13: Residential and Community Zones



## COMMUNITY ZONE

4.138 The Maze Consultation Panel highlighted the importance of providing local facilities for existing communities in the vicinity of the site. This zone should be located on the eastern periphery of the site adjacent to the Coronation Estate on the Halftown Road. The Panel recommended that development should include open space and play areas, sports pitch and small business units. Small business units would be contrary to planning guidance. The outdoor areas may or may not be a part of the stadium facility, or might be administered by the Council. They should, however, provide for local use.

4.139 The Masterplan includes a community zone adjacent to the Halftown Road to provide a buffer between the development and the existing residential community.

4.140 The local community would also benefit from the partial closure of the Halftown Road and the diversion of through traffic passed the Coronation Estate.

4.141 The specific uses would be defined through consultation with the local community. The community would have access to the sports pitches in the Sports Zone.

## PHASING

4.142 Development of the site would be phased and an indicative phasing programme is identified in Table 4.4. This takes into account the current planning policy context within which development of the site must be promoted. See further details of planning principles at Chapter 2.

4.143 The early phases of development would be focused around the stadium and International Conflict Transformation Centre. The emphasis would be on creating a compact and high quality development with necessary infrastructure and service provision and landscaping.

4.144 The stadium and International Conflict Transformation Centre would be developed as part of the first phase (to 2015). The Masterplan also allows for employment development and the sale of serviced sites as part of the Phase 1 development subject to planning policy requirements and the designation of the site as a site of strategic importance. An element of residential development (200 units) would also be promoted in Phase 1 as a form of enabling development to deliver the regionally significant projects. Later phases of residential development are proposed within the reserve areas on the western and northern parts of the site subject to plan review. The Masterplan would be reviewed over time in the context of a future review of planning policy and changing market opportunities.

4.145 The Masterplan seeks to phase infrastructure provision. However, there would be a requirement for significant new infrastructure provision to support the first phase of development, notably:

- Provision of the motorway junction and upgrading of the Blaris Road and construction of the Knockmore Link to provide access to the site;
- Site services including construction of the waste water treatment plant and new sub station
- Public transport infrastructure
- Landscaping and sustainable drainage system.

4.146 The phasing of development is illustrated in Figure 4.15.

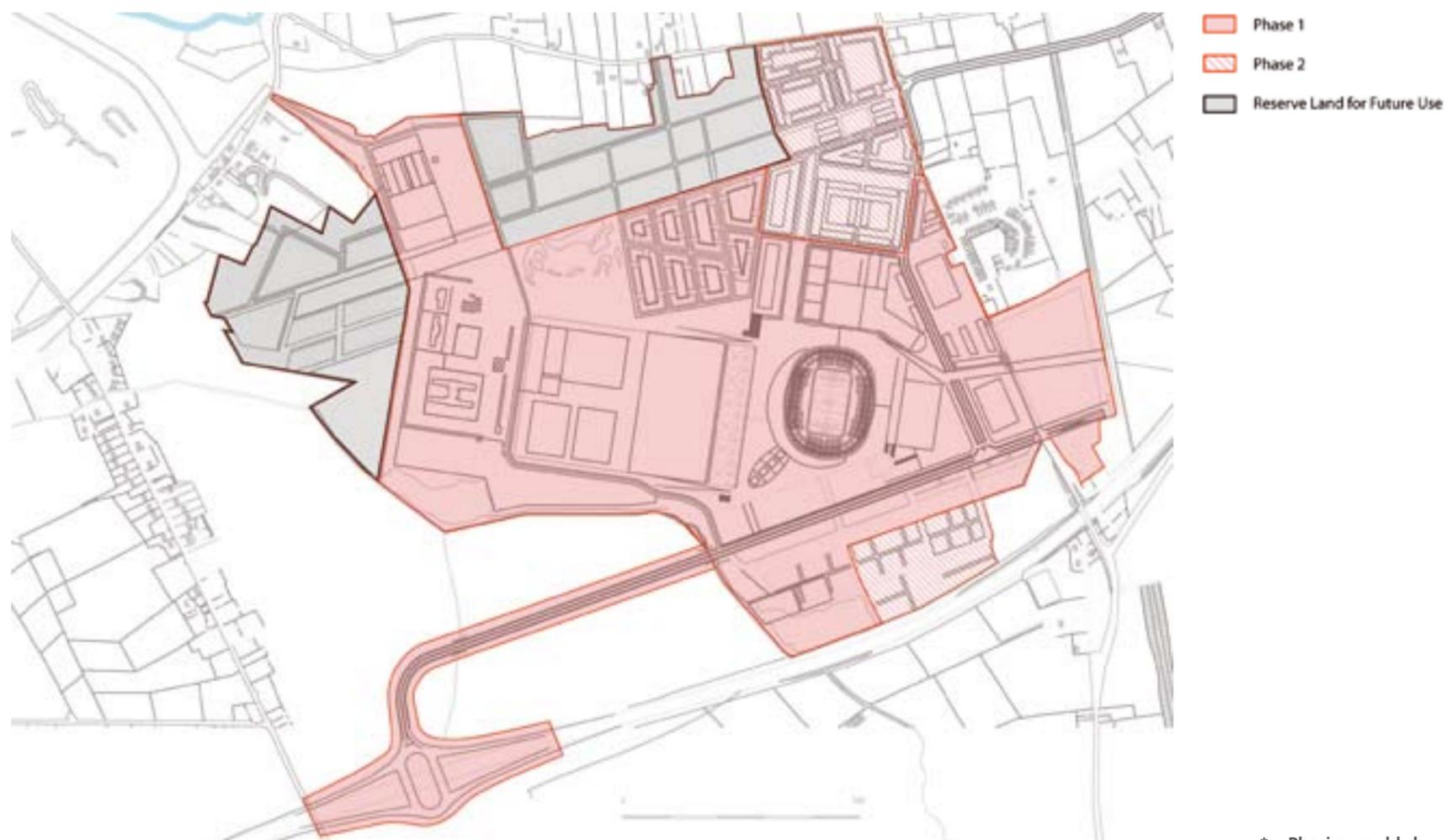


Figure 4.14: Indicative Phasing

\* Phasing could change significantly if large investment is made in the site up to or beyond 2012  
 \*\* No presumptions about potential for housing post 2015

	Phase 1 (pre-2015) sqm	Phase 1 (pre-2015) sqft	Phase 2 (post 2015) sqm	Phase 2 (post 2015) sqft	Total sqm	Total sqft
Stadium	42,000 capacity					
Hotel, retail and other lettable space within stadium	20,000	215,278			20,000	215,278
Exhibition Halls	16,000	172,223			16,000	172,223
Entertainment	4,041	43,497	3,459	37,232	7,500	80,729
Leisure/ retail	6,000	64,583				64,583
Business Offices/ research & Development)	5,427 (0.74 hectares)	58,416 (1.83 acres)	44,433 (6.04 hectares)	478,273 (14.97 acres)	50,000 (6.8 hectares)	536,689 (16.8 acres)
Light industrial	13,846 (3.71 hectares)	149,037 (9.17 acres)	46,154 (12.39 hectares)	496,798 (30.61 acres)	60,000 (16.1 hectares)	645,835 (39.79 acres)
Housing (pre-2015) **	20,000 (200 units)	215,278 (200 units)			20,000 (200 units)	215,278 (200 units)

Table 4.4: Indicative Development Phasing



# TRANSPORTATION STRATEGY

## OVERALL APPROACH

- 5.1 Whilst it is recognised that a development such as a stadium on the site would require a large number of parking spaces to meet the demands associated with maximum capacity events, planning policy requires any development to encourage sustainable travel modes. Whilst the Masterplan has demonstrated how parking requirements associated with the stadium could be accommodated, there would be a requirement to implement sustainable transport measures. These measures could include provision for alternative modes of transport to the car or a combination of alternatives.
- 5.2 The overall approach for the Maze/ Long Kesh is to aim for a realistic sustainable transport strategy that, over the long term, encourages alternative non-car modes of transport wherever possible. Hence, the transport strategy includes measures to both encourage event spectators to leave their vehicles at home such as the promotion of good public transport services, park and ride, and the encouragement of car sharing. The aim of such initiatives would be both to reduce dependency on the car and to reduce the impact of the development on both the environment and the external highway network.
- 5.3 The technical work undertaken in the preparation of the Transport Strategy has included quantitative traffic modelling and qualitative assessment. The modelling work involved updating previous work undertaken as part of the Strategic Transport Assessment and Access Strategy prepared by Atkins (2004) which was in turn based upon an amended version of the Belfast Traffic Model. However, during the modelling work it became apparent that the existing transportation model has a number of limitations that would need to be addressed to further investigate the transportation options for the site and to provide appropriate evidence in support of planning applications. The existing model is a strategic fixed matrix model limited to the PM peak hour and has no public transport element

to it. As such it is limited in the way it models effects in different periods (eg evening stadium events), or over longer time periods (eg peak spreading) and also it cannot be used to consider the effects of specific public transport elements. It also takes no account of recently issued Department for Transport advice on modelling (eg variable demand modelling). It should therefore be noted that the information ascertained from the model would be subject to change and would need further detailed consideration as the overall project progresses

## INFRASTRUCTURE IMPROVEMENTS

- 5.4 A key objective of the Masterplan is to address the current relative isolation of the Maze/Long Kesh by the creation of new transport connections which would make the site accessible not only to the local area but to the wider region. The ambition is to create an integrated transport network to ensure the site is well connected and accessible.
- 5.5 The development of the Maze/Long Kesh site would generate significant traffic given the size of the site and mix of uses proposed. This traffic would need to be accommodated but, given the overall aim of the transport strategy, new highway infrastructure would need to be minimised.

## HIGHWAYS INFRASTRUCTURE

- 5.6 Ongoing discussions with the Road Service has indicated that it may be possible to limit off-site infrastructure works to those directly or partly attributable to the development of the Maze/Long Kesh site subject to the adoption and implementation of an acceptable public transport strategy and the outcome of a full Transport Assessment..
- 5.7 Whilst further detailed study and modelling is required, based on the work undertaken to date, the scale of highway works likely to be necessary because of or to cause to be brought forward as a consequence of the proposed

development is likely to comprise the following works at or adjacent to the site:

- A - solely as a result of the Maze/Long Kesh development
- a new motorway junction at or beside the development site
  - upgrading of the Blaris Road to 4 lanes

- B - partly as a result of the Maze/Long Kesh development
- Knockmore Link;

- 5.8 The highway works likely to be required to accommodate the proposed development of the Maze/Long Kesh are identified in Figure 5.1. This will be confirmed in the full Transport Assessment.
- 5.9 In addition, earlier studies indicate that there may be a requirement for M1 widening to 3+3 lanes from the new junction to Sprucefield. The requirement for these works would be addressed in the Transport Assessment.
- 5.10 It is proposed that this highway infrastructure should be provided as a minimum to support Phase 1 of the Maze/ Long Kesh development.
- 5.11 Other schemes considered previously are generally recognised as schemes required for the relief of existing congestion and to deliver benefits to the entire region to the South of Belfast. Hence, whilst it is important that they are undertaken and it is recognised that they facilitate access from Belfast to the Maze/ Long Kesh, it should be possible for the initial phase of the proposed development at the site to occur without them, provided alternatives are provided.
- 5.12 The Transport Assessment must also test the requirement for improvements to the A101 and the roundabout at the A1/A101 intersection.



- 5.13 A Sprucefield Bypass and the M1 widening to 3+3 lanes east of Sprucefield (Junction 7) to Blacks Road are significant regional level strategic projects in roads terms which should be undertaken by Roads Service subject to statutory procedures and the availability of funding. However, it is unlikely that they would be in place before 2012.
- 5.14 In respect of any widening of the motorway east of Junction 7 (Sprucefield), the Maze/Long Kesh development should also allow for the provision of hard shoulder traffic flow to Junction 6 (Saintfield Road) if found necessary following detailed study and modelling.
- 5.15 The Transport Assessment should demonstrate network capacity and the requirement for strategic network improvements. If the Transport Assessment demonstrates insufficient network capacity, the options are to have this addressed by the Maze/Long Kesh development or to wait for Roads Service to provide the two strategic highway schemes.
- 5.16 In accordance with Planning Policy Statements PPS3 and PPS15, the cost of infrastructure necessary to facilitate the Maze/Long Kesh development must be borne by the developer.
- 5.17 Such an approach in relation to the provision of infrastructure may be acceptable as a concept and trigger levels could be introduced in respect of phasing. But such a strategy would need to be backed up by a detailed transport assessment and actual delivery of all required elements. However, the key issue with regard to the development remains the accommodation of additional traffic generated by the stadium.

### **PUBLIC TRANSPORT**

- 5.18 Infrastructure would be required to provide access to the site by public transport. A system of public transport connections could be provided to serve three functions:
- provision of efficient transport from across the region into the site for matches and other events;
  - enabling the site to also act as a regional transport 'Gateway' (see diagram below), by providing a high quality 'Park and Ride' facility with efficient bus and rail links to Belfast, Lisburn and the International Airport; and
  - integrating the site with Sprucefield shopping centre and Lisburn city centre.
- 5.19 This will be subject to further detailed assessment and would need to be considered in relation to other proposals in the Belfast Metropolitan Area Transport Plan.
- 5.20 The Masterplan proposes that consideration be given to the provision of a rail link to the site to meet part of this requirement, aligned along an old track bed from the Belfast to Dublin line to a location adjacent to the Maze/Long Kesh site. This route could potentially serve two purposes. First, it could serve the Maze/ Long Kesh site during periods when the stadium is in operation and second, if appropriate, it could act as a park and ride facility on a day-to-day basis to attract commuters from the west, heading into Belfast, off the M1 corridor. Further detailed consideration of the rail link would be needed as is required in relation to highway infrastructure. In particular, such work would need to consider the impact of the rail link on the existing Belfast Metropolitan Transport Plan proposals for park and ride at Lisburn West. Although subject to further detailed assessment, estimates provided by Translink suggest that the line and existing or currently planned rolling stock could be capable of handling some 4,500 passengers per hour.
- 5.21 Other potential elements of alternative infrastructure required to reduce dependence on the car are bus and coach priority, and upgrade measures to enhance services from Belfast and to serve other park and ride sites. Such facilities would allow buses and coaches to bypass queues and would give priority to bus and coach movements at

junctions. Specific proposals could potentially include the introduction of hard-shoulder running for buses and coaches on the M1. It is understood that consideration is being given to providing such a facility temporarily on the M1 for the purposes of serving a nearby temporary park and ride site but that strengthening, enforcement and alternative layby provision would remain an issue that would have to be addressed and resolved. Issues surrounding enforcement could be addressed via use of cameras and by controlling the speeds of hard shoulder operations but the authorities and the police would have to be fully satisfied with any such measures..

- 5.22 Overall, subject to detailed assessment, we recommend that the above combination of highway, rail and bus measures in addition to serving the Maze/ Long Kesh development has the added potential to establish a Western Gateway park & ride/interchange hub similar to that proposed for Ballymartin in the north. Such a facility would then have a much wider value to both the region as a whole and its public transport system.

### **TRAFFIC GENERATION AND VEHICLE OCCUPANCY**

- 5.23 As noted earlier, the key issue with regard to the proposed development is the accommodation of additional traffic generated by the stadium.
- 5.24 Traffic modelling work has indicated that the minimum highway infrastructure elements required to support Phase 1 of the development, as identified above, could accommodate around 6,500 vehicle arrivals to the site per hour in the evening peak. Over a 1.5 hour arrival period this would equate to some 9,750 vehicle arrivals.
- 5.25 Using the trip rate calculations from the Stage 2 work, the number of trips generated by Phase 1 of the development (excluding the stadium) has been derived. The office,

entertainment, industrial/research and housing land uses generate a total of 559 arrivals in the evening peak hour. The exhibition and small business units have not however been considered. The traffic generation of the non-stadium land uses can then be subtracted from the 6,500 vehicle arrival capacity of the surrounding highway network, resulting in a theoretical allowance for the stadium of 5,941 vehicle arrivals in the peak hour.

- 5.26 Such a figure would therefore equate to 8,912 arrivals over a 1.5 hour period and, assuming a car occupancy of 2 people per vehicle, would allow 17,824 spectators to arrive at the stadium by vehicle over the 1.5 hour peak period. Assuming a worst case scenario, where the stadium operates at full capacity, the remaining 22,178 spectators would have to arrive at the stadium on public transport. This would indicate a “modal split” between car and public transport in the vicinity of 50/50 which, whilst possible with high quality rail link and bus and coach provision, would be extremely high and may be unrealistic for this location. However, the car occupancy figure for the development is key to the modal split and if the same vehicle arrival figure identified above is used with a car occupancy of 3 people per vehicle, some 26,736 spectators could arrive by car, leaving 13,264 to arrive by public transport. This would equate to a modal split of 67/33 and is more likely to be achievable over the long term, although a 75/25 split may be more realistic in the short term. Suggested initiatives that could be adopted to achieve this level of modal split are indicated later in this report.
- 5.27 Discussions with Translink have indicated that the level of mass movement of people required could be achieved with a combination of the rail link and bus/coach measures but would prove difficult to achieve by bus/coach alone. Translink have, however, also indicated that the levels of take-up may depend heavily upon the exact nature of the event and also upon the origin of the spectators, as well as

on the level of public transport provision made and how well promoted it is. A clear public transport strategy would need to be carefully managed and delivered and fine-tuned on an event by event basis. Previous examples include the alternative transport arrangements put in place for large, high profile events at Stormont.

- 5.28 In light of the above and the need to move significant numbers of spectators in short time periods before and after a stadium event we recommend that the rail link should form part of the infrastructure provision for Phase 1. In addition it is also clear that measures to increase car occupancy rates must form part of an integrated sustainable transport strategy for the site. Both of these would help in dealing with the high peak spectator movements that would occur and would also clearly demonstrate a commitment to promoting travel to the stadium by non-car modes.

### **PARKING PROVISION**

- 5.29 To comply with existing planning guidance, it is key that, over the long term, the site seeks to minimise travel by car and encourage travel by alternative, more sustainable, modes. This is made further apparent by the parking standards set out in Planning Policy Statement PPS 3. These parking standards, when applied to a 40,000 seat Stadium at the Maze/Long Kesh site, would require 13,333 that require one parking space for every three seats. It should be noted though that these parking standards are very high compared to other guidance such as Planning Policy Guidance Note PPG 13 which relates to England and Wales and requires one space for every fifteen seats. Notwithstanding this, PPS 3, when applied to the proposed stadium at the Maze site, would require around 14,000 parking spaces, although clearly a significant number of these could potentially be shared with other elements of the development.
- 5.30 From the discussions regarding traffic generations above it could be assumed that such a level of parking provision is excessive and that provision should only be made for the

9,750 vehicle arrivals that can be accommodated by the highway network. However, it should be noted that this number of vehicle arrivals is based upon an assumed arrival period of 1.5 hours and that spectators may arrive over a longer period, thus raising the total number of arrivals. In addition it should also be again be noted that the other developments on the site would have an impact that would add to this the parking requirement. Using the development areas identified for Phase 1 in combination with the current planning policy parking standards indicates a requirement for nearly 3,000 parking spaces for the non-stadium development alone. Much of this requirement has the potential to overlap with stadium events and hence it is likely that a cumulative provision would be necessary. Thus that would amount to a requirement for 12,750 spaces, if the 1.5 hour vehicle arrival figure is used as the base requirement.

- 5.31 However, as noted previously, the PPS 3 planning requirement for the stadium alone is 1 space per 3 seats and it is therefore more than likely that this number would need to be provided from day one at opening due to planning constraints. This level of provision might be open to subsequent reduction, once the effects of the other measures to encourage bus and rail travel have proven to be effective and the use of alternative modes has been demonstrated. These latter measures would only be effective only through concerted efforts in relation to education and “carrot and stick” approaches and may take time to take effect and hence commitment to meeting aspirations would be needed.
- 5.32 Proposed parking provision is considered in further detail within the context of the Masterplan in Section 4.

### **TRANSPORT STRATEGY INITIATIVES**

- 5.33 A realistic transport strategy must be developed in consultation with Roads Service, the Department for Regional Development (DRD) and Translink that is sustainable and

encourages non-car modes of transport wherever possible. The strategy must be developed in the context of the public transport networks in the Belfast Metropolitan Area and other proposals in the Belfast Metropolitan Transport Plan (BMPT). The 2012 Belfast Metropolitan Area Transport Networks are illustrated in Figure 5.2.

- 5.34 The following paragraphs outline stadium event initiatives that could be implemented for the Maze/Long Kesh development to address these aims and to meet targets of higher car occupancy and increased modal switch to public transport.

### **PUBLIC TRANSPORT PROPOSALS**

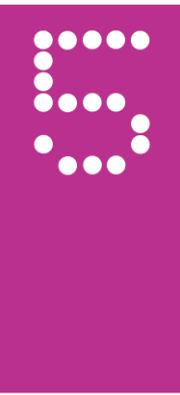
- 5.35 The introduction of a combined event/public transport voucher could be used to encourage spectators to use public transport instead of the car. Such a scheme already forms part of the proposed Parking Management Plan for the Aston Villa ground in Birmingham and focuses on a joint ticketing scheme. Following a survey of fans carried out in 1996, spectators stated that if public transport facilities were improved and were more reasonably priced then more would use public transport to travel to the ground. Other examples of such schemes include that at the new Ricoh Stadium in Coventry. In this case when you purchase your Coventry City season ticket you now have the option to purchase an add-on 'Match Day' bus season ticket for the first half of the season, valid for travel 4hrs before kick-off on match days on all buses in Coventry including Premium services. Translink have indicated that they would be open to these sorts of integrated ticketing arrangements.
- 5.36 In order to make the most of the public transport initiatives and, in particular buses and coaches, extensive bus/coach priority measures could be considered. This could include bus/coach priority measures to allow buses and coaches to bypass queues and also hard shoulder running on the M1. Translink have indicated that such measures could,

subject to full consideration of safety considerations, allow shuttle buses to be introduced from Belfast using the hard-shoulder of the M1 as a bus/coach lane, thus providing a high speed direct form of transport to the site on the day or night of a Stadium event.

- 5.37 Subject to the resolution of ownership and access issues, shuttle buses to and from Sprucefield could also be used to intercept A1 traffic. These measures have been successfully introduced elsewhere, for example at the new Stadium in Swansea where there are three large park and ride sites for match days adjacent to the M4, with shuttle buses running to the stadium every few minutes. Translink have indicated that that they would consider the opportunity to introduce these sorts of measures.
- 5.38 Extensive publicity of public transport options could be used to promote the use of public transport. This could take the form of leaflets sent out with tickets, publicity in programmes, newspaper articles and potentially a website detailing public transport options.
- 5.39 Car sharing should be encouraged, to assist in achieving a car occupancy rate of 3 people per vehicle. At The New Stadium in Swansea, car drivers are encouraged to share journeys by registering on the regional car share database [switch2share.com](http://switch2share.com).

### **STADIUM EVENT TRAFFIC MANAGEMENT INITIATIVES**

- 5.40 Regardless of the transport strategy adopted there would be significant traffic generation as a result of the proposed development and again as noted earlier, the key issue would be the accommodation of additional traffic generated by the stadium. The following paragraphs therefore outline stadium event traffic management initiatives that could be implemented to minimise impacts upon the surrounding highway network.



# 2012 BMA Public Transport Networks

## Key:

- Interchange Station
- Translink Park & Ride
- N.I. Railways
- Goldline
- Ulsterbus 'Lisburn Connect'
- Metro
- Airport
- Bus Park & Ride

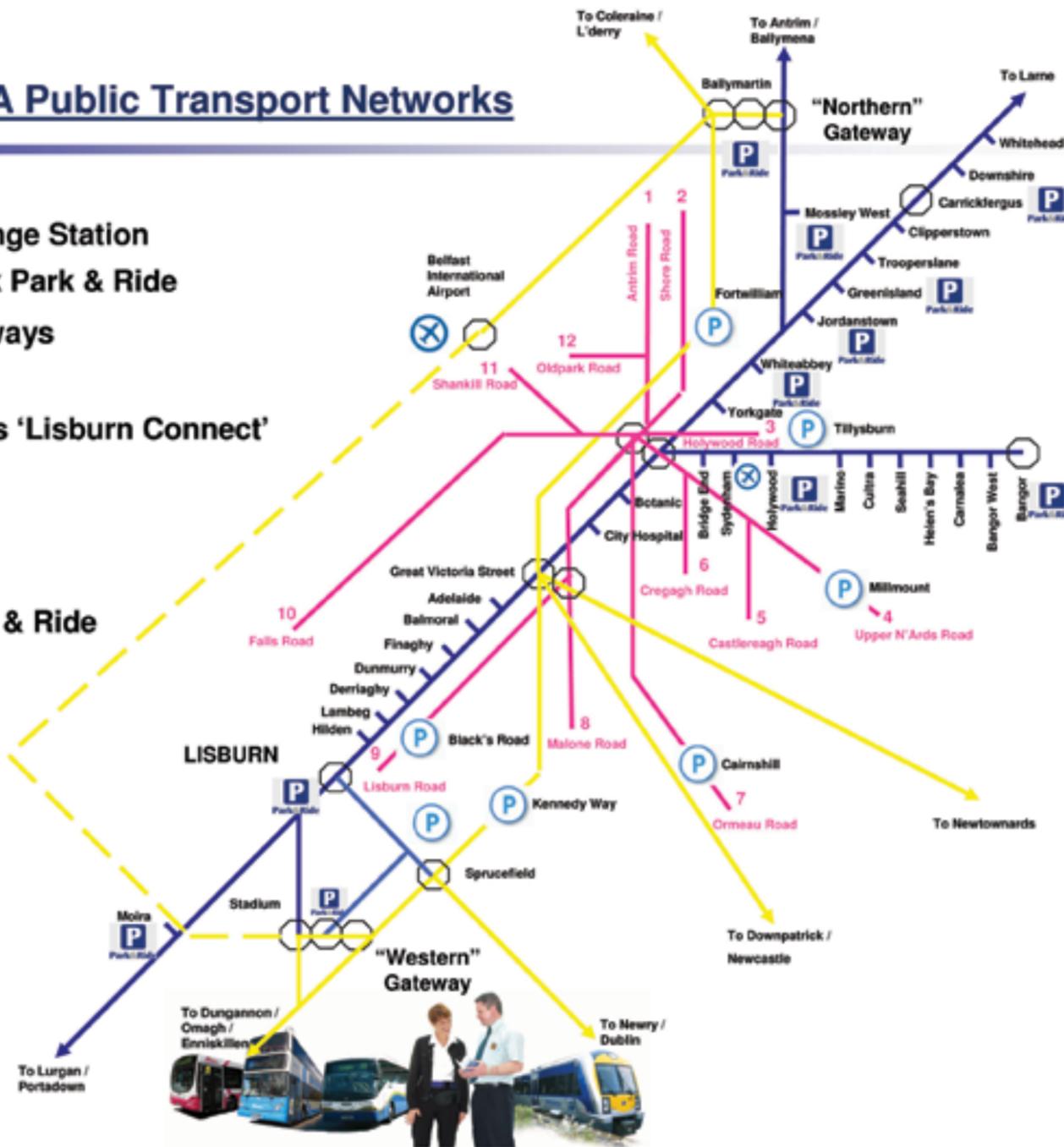


Figure 5.2: 2012 BMA Public Transport Networks

## TRAFFIC MANAGEMENT

- 5.41 Temporary traffic management schemes could be developed in conjunction with the police and other emergency services and event organisers. At Wembley Stadium temporary traffic management schemes are being developed that include temporary measures such as one-way streets and road closures to ensure that any traffic problems generated by events are mitigated and managed in order to reduce the impact on local residents, to ensure the smooth running of the event, to maintain emergency service access and most importantly to ensure the safe movement of all road users at all times, thus minimising the risk of accidents.
- 5.42 Post-event spectator measures could also be introduced to encourage people to remain in the area of the stadium after the event. At Arsenal Stadium, Arsenal Football Club are required to encourage people to remain after the event and the measures employed include post match interviews and highlights on screen, corporate entertainment and bars and restaurants within the stadium area staying open. In the case of the Maze/Long Kesh stadium, subject to safety and traffic management issues being addressed, maintaining access to bars and associated leisure facilities for a period after the event, would also reduce the impact of all vehicles attempting to leave the site at the same time.
- 5.43 Extensive Variable Message Signing (VMS) could play a major part in controlling traffic. At the Madejski Stadium in Reading, VMS has been used to warn drivers of events taking place, and of possible congestion. On match days, VMS boards are operated during the match build up and exit period and for weekday evening matches, the VMS signs are operational the day before match day to warn drivers of the forthcoming match. At the Maze stadium extensive VMS on the M1, A1 and within the site could be used to direct vehicles to parking areas. There is also the potential to use VMS to warn M1 users of event/congestion in advance of future stadium events. As part of the traffic management

proposals, traffic from Belfast could be encouraged to use the Knockmore Link and Blaris Rd via Junction 8 and traffic from the West could be encouraged to use the new Maze junction and access road, thus reducing vehicular conflicts.

- 5.44 Finally the introduction of tidal flow lanes on access roads could potentially alleviate congestion. During the match build up period, tidal flow lanes could operate to provide increased highway capacity in the direction of the stadium, whilst at the end of any stadium event, the operation could be reversed to provide maximum capacity for vehicles leaving the site. Obviously, such measures would need to be carefully considered and integrated with other measures and meet the standards laid down by the relevant authorities.

## CONCLUSIONS

- 5.45 The overall approach to the transportation strategy has been to aim for a realistic sustainable strategy that, over the long term, encourages alternative non-car modes of transport wherever possible.
- 5.46 It is recognised that the proposed development would generate significant volumes of traffic, regardless of the transport strategy developed, and that this traffic would need to be accommodated. However, given the overall approach above, the proposed strategy aims to minimise highway infrastructure. It is recommended that the following specific infrastructure be provided to support Phase 1 of the Maze/ Long Kesh development but that the sufficiency of the infrastructure improvements should be confirmed by a detailed Transport Assessment:
- New M1 motorway junction and access road
  - Local widening of the M1
  - Upgrade of part of the Blaris Road to dual carriageway standard
  - Provision of part of the Knockmore Link
  - Rail link to the site

- 5.47 Other elements of alternative infrastructure would also be required to support the above and to reduce dependence on the car and should include bus priority and upgrade measures as part of the above elements to enhance services from Belfast and to serve park and ride sites.

- 5.48 All of the above should then be supported by initiatives to encourage higher car occupancy and increase the level of modal switch to public transport.

- 5.49 With regard to other schemes considered previously, it should be noted that these are generally recognised as schemes that are required to deliver benefits to the entire region to the South of Belfast. Hence, whilst it is important that they are undertaken and it is recognised that they facilitate access from Belfast to the Maze/Long Kesh, it may be possible, subject to confirmation by a detailed Transport Assessment, for the initial phase of the proposed development at the Maze/Long Kesh to occur without them. However, measures to encourage bus and rail travel would only be effective through concerted efforts to change public attitudes and may take time to take effect.

- 5.50 The proposed transport strategy should be discussed with Roads Service, the Department for Regional Development, Ports and Public Transport Division and Translink in the usual way in terms of preparation for planning permission. The proposed strategy will be subject to further detailed investigation and assessment and actual delivery, as well as funding. In addition, it has been noted during discussions that the combination of measures identified in addition to serving the Maze/Long Kesh development may add potential to the concept of a Western Gateway park & ride/ interchange hub that could be of wider value to the region as a whole. This would need to be considered in relation to other proposals in the Belfast Metropolitan Transport Plan.



# SUSTAINABILITY STRATEGY

## SUSTAINABILITY PRINCIPLES

6.1 The development of the Maze Long Kesh seeks to meet a number of defined sustainability principles based on national, regional and local policy and guidance through the incorporation of planning and design solutions. Other principles relating to the construction and management phases of the development include the implementation of a comprehensive waste management strategy, the productive re-use of the listed prison buildings and scheduled WWII structures and initiatives such as car clubs and car sharing to reduce car use. These principles provide the basis of the draft sustainability strategy set out in this section. It is proposed to work closely with the Sustainable development Commission Northern Ireland in taking this strategy forward in the development of the Maze/ Long Kesh site.

6.2 Other principles relating to the construction and management phases of the development include the implementation of a comprehensive waste management strategy and initiatives such as car clubs and car sharing to reduce car use.

## PROPOSED SUSTAINABILITY MEASURES

6.3 To meet the sustainability objectives, a range of practical measures have been defined:

- Full remediation using appropriate best practice techniques. This would protect water sources and courses, enable ground source power utilisation and render the site completely flexible for current and future use.
- Maximise the efficiency of land-use and shared uses for outside space and buildings. This would promote the economic viability of the site as a whole and the individual uses, and also have a positive impact on equality.
- Achieve BREEAM Excellent throughout the development. This would require standards of EcoHomes Excellent for all housing, bespoke BREEAM assessments for all sport,

Table 6.1 Sustainability Objectives

Objective	Solution
Create employment for local people and improve skills	Provide space and buildings for employment uses. Create an attractive environment for investment. Create jobs through the infrastructure for the site, such as biomass production for site energy requirements. Provide a step-change in the type of employment and training offered. Compliment employment elsewhere in sub-region .
Create a sense of place	Provide for integration of a residential and community use integrated into the site (subject to planning policy). Ensure community uses are accessible to the wider rural catchment. Provide a landscape and design strategy that integrates with landscape but provides a distinctive development.
Support tourism at a regional scale	Attract tourists to the site and area for a range of activities. Encourage visitors to use public transport. Attract local, regional, national and international tourists.
Use land efficiently and reduce transport demand	Flexible, mixed use buildings, blocks and spaces, promotion of higher densities and include an element of residential and community uses (subject to planning permission).
Reduce carbon emissions and mitigate climate change impact	Energy efficiency (through solar orientation, landscaping and building design). Renewable energy production, e.g. wind turbines. Aim for net zero carbon and net energy production. Renewable energy sources available are wind, geothermal (potential) and biomass.
Reduce water use, reduce flood risk	Water efficiency in the buildings and landscaping. Rainwater harvesting and use. Sustainable drainage systems and green roofs.
Protect water sources and courses	Best practice approach to land remediation and construction
Protect and enhance biodiversity	Landscape strategy that provides wildlife areas and connections to support local and regional wildlife
Reduce transport by private car	Provision of high quality public transport e.g. rail link and park and ride. Cycle and pedestrian links and facilities. Mixed use development (see above).
Raise awareness, engage people and change behaviour	Create a Sustainable Living Centre that covers lifestyles, food production and transparency about how the site was designed and is managed. Involve occupiers in management and governance. Build on heritage of site through interpretation facilities, involve stakeholders in design.

leisure and exhibition buildings, and BREEAM Office, BREEAM Retail and BREEAM Industrial assessment for the commercial elements. CEEQUAL would be applied to the infrastructure, to enable the construction of the roads and other infrastructure elements to meet BREEAM-equivalent standards. The achievement of BREEAM Excellent would necessitate energy efficiency, on-site renewable energy, water efficiency and sustainable drainage systems

- Walkable and cyclable neighbourhoods and public transport provision
- Use of low environmental impact materials
- 50% of heat and power requirements from renewable energy. This would help meet 2020 and 2050 renewables and carbon emission reduction targets. Outline studies demonstrate this would be possible from a mixture of ground source heating and cooling, wind turbines, biomass production and solar water heating. Further research for the final regeneration framework would calculate the exact mixture and infrastructure requirements.
- Control car parking and promote public transport. A range of bus, train, parking control, walking and cycling measures would be promoted.
- Provide a range of employment opportunities. Local people have a range of skills, and also a range of training requirements. The commercial development would provide a range of unskilled, skilled, managerial and professional appointments and training.
- A landscape that encourages users to be active and access the countryside. Links to surrounding areas are an important part of the Masterplan, including links to the River, Down Royal, and Hillsborough as well as with Belfast and Lisburn via the Lagan Valley Regional Park and other parks. These links would also be valuable to the local biodiversity, which would be encouraged to flourish on the site.
- Participation and inclusion in planning, design and

management. Involving local communities and future communities in the entire process would add significant value and improve the approach to and achievement of equality.

### DESIGN MITIGATION

- 6.4 The Masterplan incorporates a number of specific design mitigation measures which would improve the sustainability performance of the Masterplan framework.

### REMEDICATION OF CONTAMINATED LAND AND GROUNDWATERS

- 6.5 Remediation of the contaminated soils and groundwaters at the site would be undertaken using appropriate best practice techniques. This robust approach is required as it would serve to potentially protect water sources and courses, and would allow the site to be more flexible and suitable for current and future end uses. In addition, one of the major benefits of such an approach to remediation is that it could potentially enable the use of ground and groundwater at the site as resources for energy utilisation such as ground source heat pumps or groundwater cooling, for both heating and cooling of buildings. This would contribute to the overall sustainability objective of using renewable energy at the site. Further clean up strategies are required to be developed based on a formal Quantitative Risk Assessment (QRA) and remediation strategy focussed on the end uses. It is recommended that consultation with the Environment and Heritage Service (EHS) should be undertaken to agree on the approach for the remediation strategy.

### MAXIMISE THE EFFICIENCY OF LAND-USE

- 6.6 The Masterplan seeks to use land efficiently and to encourage shared uses for outside space and buildings. This would promote the economic viability of the site as a whole and the individual uses, and also have a positive impact on equality issues.

### RENEWABLE ENERGY AND ENERGY EFFICIENCY

- 6.7 The long term aim for the Maze/Long Kesh site should be to provide 50% of heat and power requirements from renewable energy. This would assist in meeting its 2020 and 2050 renewables and carbon emission reduction targets. It may be possible to meet this target through the implementation of a range of measures including ground source heating and cooling, wind turbines and solar water heating. The provision of additional infrastructure would be needed to generate heat and power on-site, subject to economic viability. It is considered that these measures could include:

- Ground Source Heat Pumps – (GSHP) extract heat from the ground and waters to provide heating - and ventilation and air-conditioning - in buildings;
- Combined Heat and Power (CHP) - to further improve this biofuels such as biomass from willow and other plants are alternative options as the primary source for the CHP plant;
- Solar water heating systems for appropriate buildings;
- Photovoltaic cells – roof-mounted for building electricity generation
- Wind Power from land turbines at large and micro scale – large scale turbines could be potentially located adjacent to the M1 and small scale located on significant buildings;
- Adopt passive solar design principles; and
- Increase building efficiency through design layout, natural ventilation, use of daylight, use of energy efficient light fittings and control systems, energy efficient appliances, high performance windows and insulating materials.

- 6.8 The energy strategy is set out in further detail later in this section. It is recommended that further technical and economic feasibility studies are undertaken to determine the feasibility of the incorporation of some of these more sustainable approaches to delivering energy at the site.

### PROMOTE PUBLIC TRANSPORT AND CONTROL CAR PARKING

- 6.9 While the site is much closer to Belfast than is popularly perceived, it is vital that the issue of access and connectivity to existing communities is addressed. While a road connection to the nearby M1 motorway is the most obvious road transport link, the potential for a rail link could be important in sustainability terms. Well-publicised options such as cycle routes, park and ride schemes, links to public transport and operational planning for the stadium to encourage car sharing will also be very important. Facilities for electric/ alternatively fuelled cars should also be encouraged. A good network of cycle / walkways around the site will assist in sustainable development terms.
- 6.10 The overall aim of the transport strategy has been a realistic sustainable strategy that encourages alternative non-car modes of transport wherever possible. However, it is recognised that the proposed development would generate significant volumes of traffic, regardless of the transport strategy developed, and that improvements to highway infrastructure would be required.
- 6.11 A comprehensive public transport strategy would be developed to mitigate the impacts of increased traffic volumes. A range of measures are proposed which are set out in further detail in Section 5. It is recommended that publicity could include leaflets sent out with tickets, publicity in programmes, newspaper articles and potentially a website detailing public transport options. The introduction of a combined event/public transport voucher could be used to encourage spectators to use public transport instead of the car.
- 6.12 Traffic management measures are proposed such as one-way streets and road closures, especially on stadium event days. This would ensure that any traffic problems generated by events are mitigated and managed in order to reduce the impact on

local residents, to ensure the smooth running of the event, to maintain emergency service access and most importantly to ensure the safe movement of all road users at all times, thus minimising the risk of accidents. Extensive Variable Message Signing (VMS) could play a major part in controlling traffic, directing vehicles to parking areas, and warning M1 users of event/congestion in advance of future stadium events.

### ENHANCE BIODIVERSITY

- 6.13 Existing habitats would be protected and the biodiversity of the site would be enhanced. Incorporating parkland with some woodland planting into the Masterplan framework as part of a green corridor provides a variety of habitats for wildlife and help to increase the biodiversity of the region. The Masterplan allows for land to be set aside as a linked-up green corridor, specifically to promote the preservation and enhancement of biodiversity. This retaining existing woodland, hedgerows and scrubland habitats. Landscape planting would utilise native plant species, which would attract native bird populations. The proximity to the River Lagan corridor and its floodplain wetlands could be used as a starting point for low maintenance but high biodiversity elements spread throughout the site. It is recommended that any measures for biodiversity enhancement are developed taking due account of the Biodiversity in the region.
- 6.14 The construction of a sewage treatment works at the site would serve to maintain the aquatic ecosystems of nearby water courses such as the River Lagan. The use of reed beds could be considered which would also serve to enhance biodiversity.
- 6.15 Further examination of the aquifer could determine if this source could provide water for the site or be utilised in the cooling/heating of the buildings. Low water use and reuse of grey water could be incorporated into design of buildings and wastewater treatment on site could also be considered for grey/black water which could reduce

the burden on the existing infrastructure and add to the landscape /visual amenity.

### WATER RESOURCES AND SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS)

- 6.16 It is proposed to provide a number of storm water detention ponds in appropriate areas throughout the site to provide storage which would attenuate storm water flows, as well as improving the quality of any discharges to the local watercourse. While the high water table means that infiltration features may not be suitable to provide the necessary attenuation for the site, use can still be made of appropriate features such as piped filter drains and tanked permeable paving which can discharge to the ponds and would provide additional treatment as well as assisting in the attenuation of flows.
- 6.17 Provision is made for approximately 1.5 to 2.5 hectares of ponds to provide sufficient attenuation for the fully developed site to ensure that the capacity of the Newport Drain is not exceeded. These ponds would be provided as part of the landscaping and public spaces on the site.
- 6.18 In order to reduce water demand, water efficiency measures could be employed in the buildings including Rainwater Collection Schemes. Such systems could be employed to harvest the rainfall on the roofs, via building down pipes, and pre-filter the rainwater prior to entry into a storage tank. The water can then be distributed to satisfy the demand for water for flushing WC's and urinals.

## ARCHAEOLOGY AND CULTURAL HERITAGE

- 6.19 Mitigation proposals for archaeology and cultural heritage would be developed with EHS. The Masterplan should incorporate the re-use and protection of listed buildings and structures. A summary of potential mitigation is given below:

Potential	Criteria	Possible Mitigation
Highest	Significant archaeological or historical remains and their settings, protected by statute, i.e. Listed Buildings or Scheduled Monuments.	Any development work within these areas will be controlled to minimise impacts in consultation with EHS.
High	Significant archaeological or historical remains and their settings, although not protected by statute.	Any development work within these areas will be controlled to minimise impacts in consultation with EHS.
Medium	Some archaeological or historical potential, but the presence/ absence, extent, survival, date and significance of remains cannot presently be adequately quantified.	Development proposals within this area may require further stages of investigative or recording work, e.g. evaluation trenches followed by excavation.
Low	Low to zero archaeological or historical potential, including areas already subject to significant ground disturbance or reduction, previously excavated areas, developed areas with complex and deep building foundations, etc.	Less likely to necessitate detailed archaeological investigation, although appropriate recording of standing buildings, archaeological watching-briefs may be necessary.

## PROVIDE A RANGE OF EMPLOYMENT OPPORTUNITIES

- 6.20 Local people have a range of skills, and also a range of training requirements. The commercial development within the regeneration would provide a range of unskilled, skilled, managerial and professional appointments and training.

## ACTIVE PUBLIC USE AND ACCESS TO THE COUNTRYSIDE

- 6.21 The Masterplan provides links to surrounding areas would be an important part of the landscape strategy, including links to the River, Down Royal and Hillsborough as well as with Belfast and Lisburn via the Lagan Valley Regional Park and other parks. These links would also be valuable to the local biodiversity, which would be encouraged to flourish on the site.

## PARTICIPATION AND INCLUSION

- 6.22 Involving local communities and future communities in the entire process would add significant value and improve the approach to and achievement of equality.
- 6.23 The social offering of the Masterplan, in terms of the open space in the Community Zone should be designed in conjunction with the community. Additional community facilities will be required to support the residential community on the site and the wider community and integration of housing and commercial elements could help make a wider range of facilities viable on the site. It is also be important to establish existing housing demand in the area and access to community facilities e.g., to schools, medical centres etc in order to attract residents to the proposed housing on site.

## WASTE MANAGEMENT

- 6.24 Planning for waste prevention and minimisation at the Maze/ Long Kesh site is an important sustainability issue as a result of the waste likely to be generated during demolition and

construction and also by the waste generated after the site is operational. The scale of site preparation and in particular the amount of demolition waste should be incorporated into redevelopment of the site where possible.

- 6.25 The redevelopment of the Maze/Long Kesh site provides an opportunity to adopt 'Towards Resource Management' the Northern Ireland Waste Management Strategy 2006-2020. The strategy, launched in March moves away from simply managing waste and places an emphasis on waste prevention, minimisation and recycling as part of the waste hierarchy.
- 6.26 During demolition and construction at the Maze/Long Kesh site the opportunities to adopt the waste hierarchy will include:
- Preventing the generation of some demolition waste by maintaining existing listed buildings and scheduled WWII buildings as part of the Integrated Centre for Conflict Transformation (ICCT);
  - Reusing materials from demolition in new construction e.g. crushed concrete may be reused as an aggregate in new construction.
  - Identifying offsite recycling opportunities for construction/ demolition waste, e.g. plaster board may be recycled off site for potential re-use.
- 6.27 A building audit should be conducted to identify the potential for material recovery and demonstrate resource efficiency options. Tools such as ICE demolition protocol which identifies the potential for effectively recovering material from demolition and the WRAP RC toolkit which assesses recycled content in construction projects should be consulted during this process.
- 6.28 A waste strategy aligned to the NI waste management strategy should be developed for the Maze/ Long Kesh site and provision should be made for waste segregation and recycling facilities. The strategy may form part of a wider

environmental management system for the operation of the stadium and arena.

## SUSTAINABLE CONSTRUCTION AND BUILDINGS

- 6.29 The built environment is at the heart of our economy; it shapes how we live our lives. But the manner in which it consumes natural resources and raw materials means that it is responsible for some of the most serious global and local environmental change. Buildings alone are responsible for approximately 40% of all greenhouse gas emissions and construction wastes make up 30% of total waste produced in Northern Ireland.
- 6.30 New policy development associated with sustainable development opens up wide-ranging opportunities to demonstrate sustainable construction techniques, not least in the construction of new buildings such as the proposed stadium, community facilities and planned development of new roads.
- 6.31 Better eco-design and building practices are crucial if we are to force the pace of improvements in the construction industry. The sustainability strategy can support this by;
- Giving consideration to whole life costs and long term running costs at the design and tendering stage of the construction projects
  - Putting increased emphasis on the construction of carbon neutral buildings and low carbon design in specification for new buildings.
  - Encouraging low energy and passive solar design, energy efficiency and the use of renewable energy and combined heat and power systems in new buildings and in the refurbishment of older properties.
  - Giving consideration to appropriate energy conservation techniques including use of appropriate insulation materials.

- Employing techniques that encourage waste prevention and minimisation. This means designing for waste prevention and incorporating waste reduction, reuse and recycling techniques at all stages of construction and in the site plan and organisation.
- Sourcing raw and recycled materials locally, to reduce transport and associated carbon dioxide emissions.
- Considering supply chain certification i.e. FSC timbers etc.

6.32 It would be appropriate that all buildings on the site to adhere to a Charter for sustainable development, committing developers, owners and project managers to adhere to sustainable development principles of design and site management

## ENERGY STRATEGY

- 6.33 The redevelopment of the Maze/Long Kesh site would result in changes of use and hence changes in the energy demand profile when compared to the current and previous site uses.
- 6.34 There are a number of national and regional energy objectives, namely:
- DETI's Strategic Energy Framework has a target of 12% electricity generation from indigenous renewable sources by 2012 (this is currently running at 3%) (Department of Enterprise, Trade and Investment's Strategic Energy Framework for Northern Ireland, June 2004);
  - UK target for renewable energy provision is currently 10% by 2010, with aspiration to reach 20% by 2020 (UK Government's Energy Policy set out in Energy White Paper, February 2003) and for the UK to be on a path to cut CO2 emissions by 60% by 2050;
  - Currently DETI's main policy mechanism is the Renewables Obligation (NIRO). This places a legal requirement on all NI licensed electricity suppliers to source a specified quantity of the electricity supplied to final consumers

from renewable sources. The current obligation for 2006/07 is 2.8%, rising to 6.3% in 2012/2013; and

- The Regional Development Strategy 'Shaping our Future' also highlights the need to promote a wider choice of energy supply, including the use of renewable energy sources, in the interests of regional competitiveness and sustainability.

## RENEWABLE ENERGY SOURCES

- 6.35 Sources eligible for consideration in meeting the above targets include;
- Landfill gas;
  - Sewage gas;
  - Hydro;
  - Onshore wind;
  - Offshore wind;
  - Biomass (subject to special conditions);
  - Waste (subject to special conditions);
  - Geothermal power, including heat extraction from waters;
  - Tidal and tidal stream power;
  - Wave power;
  - Photovoltaics; and
  - Energy crops (subject to special conditions).
- 6.36 The energy demand at Maze/Long Kesh can be considered as three types:
- Heating and cooling of buildings;
  - Heating of water for hot water consumption; and
  - Electrical power for appliances, lighting and other systems, etc.
- 6.37 This demand could be met through conventional grid connections to mains electricity and/or gas (assuming that the proposed South-North gas pipeline would go ahead)

or through the provision of additional infrastructure to generate heat and power on-site.

### **A SUSTAINABLE APPROACH TO DELIVERING ENERGY REQUIREMENTS**

6.38 A sustainable approach would involve:

- Using renewable energy; and
- Using energy efficiently.

### **ENERGY REDUCTION**

6.39 Energy reduction could be achieved by the following measures:

### **ADOPTION OF PASSIVE SOLAR DESIGN PRINCIPLES**

- Applicable to all buildings;
- One-off opportunity to reduce lifetime energy requirements (in modern housing up to 20-25% of heating and lighting energy can be saved);
- Unlikely to add any additional cost to the development, and would bring reduced energy costs in use; and
- Can maximise potential for renewable energy (e.g. promoting layouts with south-facing roof areas that would support solar power generation).

6.40 Key aspects in promoting passive social design principles to consider would include:

- Site layout and building orientation;
- Room layout within buildings;
- Avoidance of overshadowing;
- Window sizing and position;
- Use of conservatories and atria where appropriate;
- Natural ventilation;

- Lighting (e.g. day lighting, use of energy efficient light fittings and control systems);
- Thermal buffering; and
- Landscaping (e.g. use of trees, vegetation as shelter against prevailing cold winds and shading for summer cooling).

### **ADOPTION OF OTHER ENERGY EFFICIENCY MEASURES**

6.41 Other energy efficient measures may include:

- Energy efficient appliances;
- High performance windows;
- Insulating materials

6.42 Several renewable energy options are available:

### **GROUND SOURCE HEAT PUMPS**

6.43 Where the peak heating and cooling loads for buildings are similar, a ground source heat pump (GSHP) could be provided and sized to achieve the demand of both. Subject to further detailed appraisal and viability assessment, this system would be suitable for the following components of the Masterplan:

- International Conflict Transformation Centre & surrounds;
- Sports Zone; and
- Office, Entertainment & Leisure.

6.44 A GSHP takes low temperature heat from the ground (including ground and other waters) and upgrades it to a higher more useful temperature by electrical input, to a mechanical system for utilisation within the building. Heat is extracted from the earth through a liquid medium (ground water or anti-freeze solution) and pumped to the heat pump or heat exchanger. The energy is then transferred to the heat pump refrigerant circuit via a heat exchanger, which

operates with the same scientific process as a refrigerator, upgrading the heat output for use in heating systems, or in a reverse cycle to provide the cool output for cooling systems. The diagram below shows the layout of a typical GSHP system.

6.45 The GSHP is driven by an electric motor; which is a relatively expensive fuel. Currently, in the UK, the GSHP would need an overall coefficient of performance (COP) of 3.5 to break even on current fuel costs using day-rate electricity prices and gas prices using a very efficient gas boiler heating system. The COP indicates the available unit output from the unit input, in effect for the above, a 1kW of electrical input would achieve a 3.5kW heat/cool output. With recent developments and when used to supply low temperature water based heating systems and cooling systems, seasonal efficiencies of between 350 and 500% are common for GSHP, i.e. COP's between 3.5 and 5.

6.46 Based on £500 per kW, an outline budget capital cost of £4-5M is estimated for meeting the heating and cooling needs of the buildings. Whole-life costs would include savings through reduced consumption of gas or grid electricity (for COP of 4 the savings are in the range of 25-70% depending on comparative system). Capital cost could be reduced, e.g. if scheme reduced to supply 50% of heating/cooling needs. Payback period depends on the scheme adopted (e.g. number and depth of boreholes, heating/cooling plant requirements depending on no. of buildings. This can be modelled as part of the design process. Currently, it is suggested that this is in the order of 10-15 years for COP of 3.5, based on current energy prices.

6.47 The cost of the GSHP is higher than a conventional boiler and chiller system, due to the excavations required to emplace the ground heat pump loop. The costs of implementing the technology vary depending upon the quality of the ground in which they are being located, and the type of

system considered the most practical. In general if ground conditions are favourable for a horizontal installation of ground pipework, then the cost of the system would be around 30% greater than the cost conventional of the boilers and chiller installations.

- 6.48 Based on a review of ground and groundwater conditions at the site and an initial desk study, there are good prospects for the implementation of a Ground Source Heat Pump (GSHP) system at the Maze/Long Kesh site. The use of GSHP is dependent on clean-up of the existing groundwater and soils at the site and dependent on groundwater monitoring to determine the availability of groundwater. Provided that effective remediation of the groundwater can be delivered so that clean groundwater is available, it is considered that GSHP using groundwater is a good option for the site.
- 6.49 To further improve the overall efficiency of the GSHP system, the electric motor for the heat pump could be powered by an electrical generating renewable energy source such as a wind turbine connected to a central battery pack to satisfy the electrical demands of the GSHP. This would provide a wholly renewable energy source for the heating and cooling system, and assist towards the goal of a carbon neutral system.
- 6.50 Advantages and disadvantages associated with ground source heating are listed below:-

#### ADVANTAGES

- High reliability (few moving parts, no exposure to weather)
- High security (no visible external components to damage or vandalise)
- Long life expectancy (typically 20-25 yrs and up to 50 yrs for the ground coil)
- Low maintenance costs (no regular servicing requirements)

- Low noise, no flue, no local pollutant or ventilation requirements
- No boiler, or fuel tank and approximately 50% less plant space requirement than conventional boiler system

#### DISADVANTAGES

- Cost of the GSHP is higher than a conventional boiler and chiller system
  - Driven by electricity (an expensive fuel)
  - Further geotechnical investigations are required to assess suitability of ground conditions, aquifer, etc
  - Extract/discharge license would be needed
  - Further design required
- 6.51 Further feasibility and modelling studies would be required as part of the detailed design process. Investigations of the aquifer would be needed to establish geo-thermal potential and water yields needed to drive the GSHP system. In addition, investigations to further improve the overall efficiency and energy consumption of the GSHP system should be conducted focusing on the potential supply of electricity from renewable energy sources. For instance a wind turbine or photovoltaic (PV) array connected to a central battery pack could satisfy the electrical consumption of the GSHP, thus providing the wholly renewable energy source for the heating and cooling, making the systems carbon neutral. Any existing boreholes should be maintained and protected from contamination, allowing for further feasibility studies.

#### SOLAR WATER HEATING

- 6.52 In certain cases it may possible to enhance and assist the standard hot water systems with the installation of solar collectors. These provide an ideal method of utilising the renewable energy of the sun as a source of hot water generation off setting primary energy use.

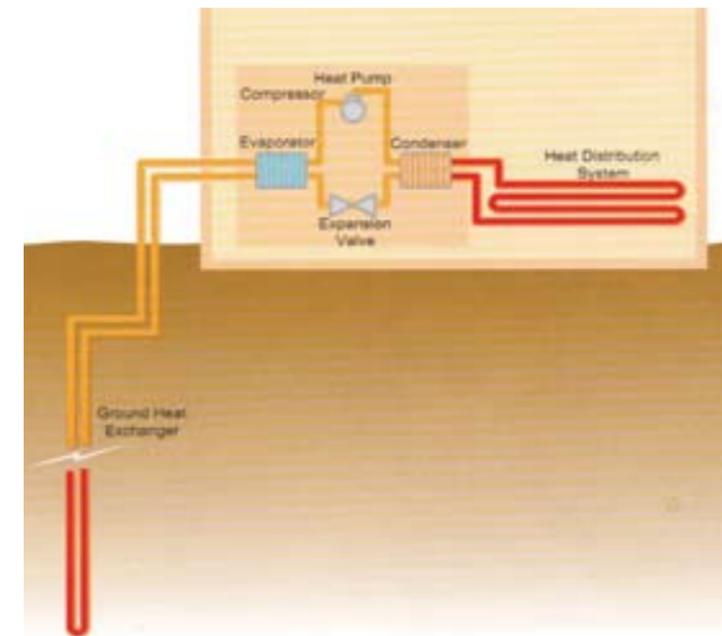


Figure 6.1: Layout of Typical GSHP System

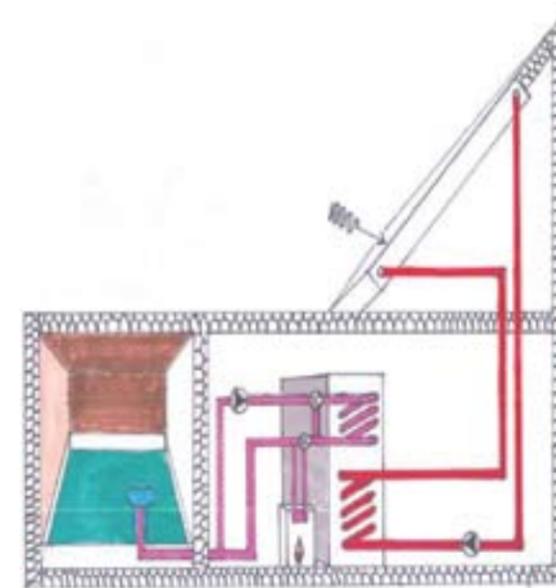


Figure 6.2: Solar Collectors used for Hot Water Generation

- 6.53 Small scale application of solar collectors could be considered in some of the buildings. The solar collector circuit would serve a heating coil within a domestic hot water cylinder as the primary heating medium when conditions allowed, with a secondary coil from the boiler system providing the back up at times when the solar collectors are non operational.
- 6.54 The solar collectors would be visible and could be used as a sustainable project teaching aid to educate and make people aware of energy and environmental issues.
- 6.55 The table below identifies the advantages and disadvantages associated with solar collector installations:

#### ADVANTAGES

- Solar collectors use solar energy which is a clean renewable energy source;
- Solar energy is used to heat water, reducing the need for heating systems;
- Can be built into roof structure during construction to offset capital costs;
- Combined systems are available to provide domestic hot water and space heating;
- Solar collectors can also be used for cooling in buildings by taking advantage of the cooler night time temperatures;

#### DISADVANTAGES

- System efficiency is reduced when high water temperatures and/or low ambient temperatures are experienced;
- Hot water may require to be supplemented in winter;
- System efficiency is reduced during cloudy days;
- Storage vessels may be required to provide hot water in the evenings;
- May require a large area of collectors to provide enough heating;

- 6.56 The feasibility for Solar Collectors for the Maze/Long Kesh buildings would need to be determined based on hot water loads. For example, it may be feasible to use solar collectors for small domestic loads such as hot water taps in the amenities for the building. Larger loads such as showers in the changing areas may not be feasible.

#### WIND POWER – LARGE SCALE AND MICRO

- 6.57 The installation of large scale and micro scale wind turbines could be developed for inclusion in the site for the generation of electricity. Small scale wind turbines do not have the same noise inconvenience or problems in achieving planning permission as the large power generating turbines.
- 6.58 Micro-scale turbines can be erected at roof level and generate sufficient power to operate small scale electrical appliances such as lighting or extract fans. They can be used in conjunction with battery storage for the operation of electrical equipment at time when the wind and solar sources are insufficient.
- 6.59 Small scale wind turbines have a conversion efficiency of up to 60%, as well as such benefits as no pollution to the atmosphere, and minimal maintenance over a predicted life span of about approximately 20 years.
- 6.60 It should be noted that wind turbines are known to interfere with Radar and navigation systems, particularly Primary Surveillance Radar (PSR) which consist of an antenna constantly rotating through 3600, and send out pulses of electromagnetic energy, which may result in reflections that are displayed on a controller's screen. The Maze site lies in the flight path of Belfast Airport which is situated 12 miles away. As a result, the developers of any proposed wind turbines at the site should evaluate the potential effects and consult with the Civil Aviation Authority (CAA) well before committing to a planning application.
- 6.61 The advantages and disadvantages associated with wind turbine installations are listed overleaf:

#### ADVANTAGES

- Wind power is a clean and free renewable energy source;
- Wind turbines don't produce atmospheric emissions that cause acid rain or greenhouse gasses;
- Wind energy can be used in conjunction with other renewable energy sources such as solar energy to provide continuous energy generation;
- The energy required to make a wind turbine can be recovered in a few months of operation;
- New roof top turbines are being designed;
- Can be used on individual systems, such as street lighting;
- Noise levels of modern turbines are not as high as previous;
- Any excess energy can be sold to the grid supplier.
- Small scale application are not hazardous to bird life

#### DISADVANTAGES

- Wind can be intermittent, therefore storage or a backup source may be required;
  - The capital cost of a wind turbine can be high;
  - Wind turbines are visually obtrusive and somewhat noisy in operation causing issues when seeking planning;
  - Not all winds can be harnessed, so meeting demand may not always be possible;
  - Turbines are site dependant;
  - Wind energy can be purchased from electricity suppliers, if available, which could be less expensive than onsite power generation.
  - DC Electricity source produced, conversion to AC required for applications
- 6.62 A study is required to determine the feasibility of the use of wind power for electricity generation both at large and small scales. Design, colour and siting needs to be considered to

minimise impacts on the development and surrounding area. The incorporation of wind turbines could provide a feature for the development and provide a distinctive landmark within the site when views from the motorway.

**PHOTOVOLTAICS**

6.63 Photovoltaic (PV) cells are another form of renewable energy source that could be utilised. PV cells are semi-conducting materials constructed in panels that convert sunlight directly into d.c electricity. They can be arranged in an array on south facing roofs, walls or integrated into the building fabric to offset costs by replacing other building materials.

6.64 With regards to their suitability for application within the development as the sun's solar energy supply is intermittent, small scale applications should be integrated with small scale wind turbines and include a battery bank, for use in stand alone systems such as lighting or extract fans.

6.65 Conversion efficiencies of solar energy to electrical power is improving with advances in technology and ranges from 7% to 18%, an installation of at least 7m2 of modules is needed to generate 1000 Watts peak (1kWp), yielding perhaps 800kWh in a year. Installed costs range from £300-£450 per m2 for roof covering, and from £850 to £1300 per m2 for laminated glass.

6.66 The advantages and disadvantages associated with PV installations are listed below:

**ADVANTAGES**

- PV cells use solar energy which is a clean renewable energy source;
- PV cells are light and modular;
- Whilst operational they do not require large amounts of maintenance;

- Diffuse and reflected sunlight still produce electricity during cloudy days;
- Solar energy is a free source;
- A tracking panel can collect more energy as it follows the path of the sun during the day and can also be programmed for different seasons;
- Can be built into building fabric during construction to offset capital cost;
- Can be used on individual systems, such as lighting.

**DISADVANTAGES**

- High initial capital costs;
- PV cells generate a dc current only, some form of conversion device is required to get ac;
- Energy requires to be stored to provide a continuous power supply;
- The solar energy received varies throughout the year and depends on latitude, season, time-of-day, and atmospheric conditions;
- The production of the cells uses some potentially harmful chemicals, reducing its environmental image;
- PV panels have a low efficiency in converting solar energy to electricity;
- Green energy could be purchased from electricity suppliers which could be less expensive than onsite solar power generation.

6.67 Due to high capital costs compared to power output, payback periods are currently too long to make cost effective. However small scale installations could be provided that can act as an educational resource.



Figure 6.3: Micro wind turbines used for building Electricity Generation



Figure 6.4: Example of photovoltaic panels

## BIOMASS PRODUCTION

- 6.68 The use of Combined Heat and Power (CHP) is one approach to the promotion of energy efficiency and is considered in further detail below. The use of CHP with biofuels as a fuel source can also improve overall sustainability of the development.
- 6.69 The DTI and Carbon Trust's Review of Renewables Innovation The D(2003) predicted that biomass could provide towards 20% of UK electricity demand by 2020. This was backed up by Defra's recent Biomass study task force report (2005). The main proposed sources of biomass are short rotation coppicing of willow and growing miscanthus (see below). Willow plantations and miscanthus fields are both aesthetically attractive land uses for neighbouring urban areas, and also cause little nuisance due to the minimal need for agricultural care and harvesting.
- 6.70 Biomass is particularly valuable to energy suppliers because it can provide heat as well as electricity. Some coal-fired power stations are mixing biomass with their fuel, to help them meet their Renewables Obligations. Biomass can be combusted separately in Combined Heat and Power (CHP) systems and local and district heating schemes. The latest technologies include pyrolysis and gasification plants, which provide more efficient means of gaining power from the biomass.
- 6.71 Energy from biomass production could be integrated with other schemes. For example the combustion facilities could additionally use the city's tree and parks maintenance waste. Municipal waste can also provide a fuel source. Apart from waste management issues, willow plantations can provide part of the city's waste water treatment, by being irrigated with waste water. This provides the willow with nutrients, removing the need for fertiliser application, so making the production process far cheaper. It also provides a valuable wastewater treatment process and reduces pollution risk. This approach has been successfully trialled and launched in the region.

- 6.72 CHP facilities would provide the market for the biomass. The viability of this approach would depend on the amount of land required to grow plant biomass and the total energy demand at the site. Electricity and energy which can be generated by CHP is likely to be a small but important contribution to the total Maze/Long Kesh energy demand. The site area required for biomass production is however likely to be a significant area.
- 6.73 In order to determine the site area requirements it is assumed that one hectare of planting would produce ten tonnes of biomass/annum (ODPM, Planning for Renewable Energy, 2004). Based on experience from the ECOS project in NI, this would be sufficient for around 10,000kWh of electricity and some 17,500kWh of heat using CHP. To put this into context, a typical small CHP plant powered by biofuels, which could be used at the Maze site is some 300kW. It is estimated that this small CHP plant would require some 24 hectares of planting. This size of CHP plant would generate approximately 240,000 kWh, which is estimated to be around 1% of the total peak electricity consumption for the site. Clearly there is an opportunity to site a larger CHP plant on the Maze/Long Kesh site which would give a greater contribution to overall electricity and heat demands and could use other local biofuel sources. However, this would be dependent on significantly increased biomass production off-site.
- 6.74 In addition to the land required for biomass planting, further land area would be required for: a) for the power plant, b) for on-site storage of biomass material and ash (i.e. a silo or large warehouse), c) associated delivery yard areas, access roads. Although some of the areas set aside for parkland and landscape (29.49 hectares in total) could potentially be used for biomass production, owing to the large land areas which would be required to provide CHP capacity, some biomass production facilities would need to be located off site to make this option feasible. Many companies are setting up such facilities or helping biomass producers find markets. Farmers are being

encouraged to grow miscanthus through Defra's energy crop scheme. Establishment grants support farmers in converting to the crop, with grants in the region of £1000 per hectare.

- 6.75 In summary, it may be possible to accommodate a CHP system based on the use of bio fuels in and around the Maze/Long Kesh site and the amount of electricity and heat that this facility could produce would contribute to the overall energy requirements at the site. CHP with biomass should be considered as an option for further feasibility study and this approach would demonstrate commitment to sustainable approaches to energy efficiency. In addition, this could be part of a demonstration project as part of the 'exemplar sustainable development' of the site and for the development of a prototype for use elsewhere. This approach could perhaps also be used as a kick-start to the potential biomass industry.
- 6.76 Biomass production also provides a cost-effective method for the remediation of contaminated land. Willow and miscanthus both remove contaminants from the soil, which are then removed from the site during the harvests. Toxic elements are then safely captured as part of the combustion process.
- 6.77 Willow and miscanthus both have proven capacity to support local biodiversity. There can be controlled footpath access for the general public. Activities could include walking, cycling, bridleways and site visits. The provision of visitor facilities would encourage learning and understanding about the process. Through connections to the national curriculum and local schools, vandalism could be minimised.

## ENERGY EFFICIENCY

- 6.78 Energy efficiency could be achieved by the following measures.

## COMBINED HEAT AND POWER

- 6.79 Combined Heat and Power (CHP) is the name applied to the process which from a single stream of fuel simultaneously

generates heat and power (electricity). In order for a system to be considered efficient and suitable for an installation there has to be a demand for the heat output generated in the production of electricity, where the base load of heat and power exceeds 4000 hours per year.

6.80 Within the development of the Maze/Long Kesh site, there are numerous building types presented in the options which could be considered suitable for CHP installations these are:

- Leisure facilities – operate early morning to late evening high demand for hot water
- Residential Homes – 24 hour operation needing high ambient temperatures. High demand for domestic hot water
- Hotels – Long operation hours, need to maintain customer comfort. Often includes leisure facilities. High demand for domestic hot water
- Community heating – Instantly available, affordable warmth, especially where elderly residents and young children accommodated.

6.81 To achieve a 4 or 5 year pay back period, a CHP unit would have to operate for 4500 hours per year, or about 12-14 hours per day; 6000 hours per year would provide a simple payback period of 3 years. This shows the importance in providing the CHP system at the outset of implementation and within the context of the use of the buildings.

6.82 The advantages and disadvantages associated with CHP installations are identified below:

### ADVANTAGES

- Reduction in overall energy consumption;
- Reduction in CO2 emissions
- Use of biofuels and to power CHP (e.g. woodchip, willow coppicing, cattle slurry)

- Wood as a fuel can be considered sustainable, as it is a relatively benign fuel source and is considered carbon neutral as it only emits the carbon dioxide that it has absorbed over its life

### DISADVANTAGES

- Primary energy consumed on site would increase
- May move focus away from the use of renewable energy sources
- Large area of the site is used for biomass production unless off-site biomass sources are considered

6.83 CHP is a front runner in terms of potential energy and heat supply. However, for CHP options to be economic a continual year-round demand for heat would be required (i.e. swimming pool, leisure centre, hospital, housing etc). The CHP system needs to be integrated with the landuses requiring a year round heat demand at an early stage. In order to design a CHP system, the energy demands for the site uses should be comparable with the potential CHP supply. Further feasibility studies are required to determine the viability of this option. This should include a more detailed review of energy demands for landuses at the site.

6.84 As detailed above, further investigations are needed to identify sources of bio-fuels used to power any CHP installations and improve the sustainability of this option.

### CONCLUSIONS

6.85 It is recommended that an energy strategy is adopted for the site which subject to economic viability establishes a commitment to provide a combination of renewable energy from for example, wind, solar, and GSHP and to improve energy efficiency through for example the use of CHP powered by biofuels. Subject to further detailed appraisal and economic viability assessment, this could be supported by biomass production on the site and in the

wider area surrounding the site. Although the economic viability of a number of potential measures would clearly need to be tested further, there is a real opportunity at this site to implement renewable energy technologies and to promote best practice in sustainable development. The size of the site and its strategic location provide opportunities for harnessing natural resources such as wind power, and groundwater for heating and cooling buildings, and biomass production for CHP. Subject to potential planning issues eg in relation to flight paths being resolved, the siting of wind turbines at the site could also form part of a landmark gateway feature for the site.

6.86 The implementation of the overall sustainability strategy and energy strategy would contribute to the delivery of Government policy for renewable energy and sustainable development.



## REGENERATION BENEFITS

- 7.1 As illustrated throughout this document, the Maze/Long Kesh site provides a unique opportunity to create a vibrant new destination containing a blend of sports, leisure, living and working environments that together would combine to create a truly unique environment. Given the scale of development envisaged, the development proposals would clearly have a significant impact within a socio-economic context, and assist in delivering a wide range of local, sub-regional and regional regeneration benefits.
- 7.2 The opportunity also exists to take forward aspirations to foster equality, respect and social harmony through the creation of place that is open, accessible and welcoming to all cultural and religious groups, ensuring that a range of facilities are designed to take forward the ongoing transformation and regeneration of the region. The uses proposed would support cross community integration and positively promote objectives of inclusion, equality and tolerance and respect.
- 7.3 During the consideration of the regeneration impacts that could be achieved through the implementation of the Masterplan, a focus has been placed upon defining a series of SMART outputs, namely those that are:
- Specific – i.e. related to specific objectives about what should be achieved;
  - Measurable – i.e. in a format that can actually be quantified;
  - Achievable – i.e. capable of being achieved within a reasonable time scale, whilst at the same time ensuring that the maximum advantage is gained;
  - Realistic – i.e. within the resources available; and
  - Time limited – setting out by when the expected outputs would be achieved.

- 7.4 In addition to SMART outputs, the Masterplan would also deliver a wider range of qualitative impacts, i.e. those that may not necessarily be measurable but would be nonetheless significant in the beneficial impacts that they may deliver.

### DELIVERING SMART OUPUTS

- 7.5 The Masterplan provides a comprehensive approach to transforming the currently disused site of the Maze/ Long Kesh to create a high quality, vibrant new development which would benefit the local sub-region as well as the region as a whole. The transformation of the site is vital to achieving the wider objectives of delivering social and economic regeneration throughout the whole community as envisaged under the RRI initiative. The range of SMART outputs are illustrated in Table 7.1.

### THE IMPACT OF DEVELOPMENT PROPOSALS – INDIRECT AND WIDER IMPACTS

- 7.6 Whilst the social, economic and employment impacts are in themselves considerable, the development would also deliver a range of wider economic, social and community benefits that whilst difficult to quantify precisely, are nevertheless crucial to the wider regeneration of the area and maximisation of potential benefit from the site.
- 7.7 Wider benefits include the following key elements:
- Economic opportunity and diversification. The proposals presented by the Masterplan provide the opportunity to deliver a wide range of high quality new jobs and as such would assist greatly to diversify the economic base of the area, offering a wide range of economic opportunities for local and regional businesses and residents

- Social inclusion and equality of opportunity. The Government's vision for the future is for a peaceful, inclusive, prosperous, stable and fair society firmly founded on the achievement of reconciliation, tolerance and mutual trust and the protection and vindication of human rights for all. It would be founded on partnership, equality and mutual respect as a basis of good relations. The proposals in the Masterplan would assist in the promotion of these objectives by promoting a range of uses for all sectors of the community and promoting integration through sports, culture, leisure and heritage, and new employment and housing opportunities including integrated housing.
- The promotion of enterprise and innovation. It is anticipated that the attraction of new high value-added businesses into the area, together with a skilled young, aspirational workforce into a new high quality living and working environment would assist to foster a culture of enterprise and innovation within the area;
- Supporting wider regeneration policy objectives. Implementing the Masterplan would assist greatly to deliver a range of objectives identified in the background framework of regeneration strategies including the diversification of the economic base, connecting residents to emerging economic opportunities, increasing accessibility to these opportunities to disadvantaged groups in deprived urban communities creating a new enterprise culture and a general improvement to the profile of the region;
- The attraction of inward investment. The high quality urban development proposals tailored towards the needs of modern households in terms of retail, leisure, sports, entertainment and residential uses would be of fundamental importance to ensure that the area can



compete in the highly competitive marketplace for inward investment. In addition, a new bold development would provide a strong message to other investors that within the region and the Belfast sub-region in particular was a modern, vibrant and successful location to invest;

- Stimulating tourism. The provision of a range of high profile sports, leisure and international heritage attractions across the site provides a significant opportunity to attract a greater number of international tourists to both the local area and the wider region, stimulating additional spend across the area and enhancing the wider tourism industry across the region;
- Improving the physical environment and overall quality of life. A key theme running through the implementation of the Masterplan would be the emphasis upon high quality urban design and place-making to ensure that physical development across the site comes forward within an attractive, co-ordinated and well considered design;
- Providing new facilities and connecting with communities. The new employment, retail, leisure, social and community facilities would be of direct benefit to the existing population. Integration of the new development with surrounding existing communities would be crucial to ensure full access to the new opportunities and facilities;
- Delivering strategic environmental improvements. The removal of the land inefficient uses would deliver a considerable area of underutilised land for new development. The Masterplan area could become a catalyst to deliver environmental improvements throughout the wider area, in particular enhancing existing environmental assets such as an environmental corridor from the River Lagan through to Hillsborough, Lisburn and towards Belfast;
- Promoting sustainability and the use of renewable energy sources. The regeneration of the site offers a unique opportunity to both contribute towards sustainable

living, and to promote the use of renewable energy sources, in line with government objectives

- Delivering strategic transport improvements. Significant investment in new road and public transport network including new road & public transport connections which would enhance accessibility for business and residential communities across the sub-regional area;

7.8 In the absence of the delivery of such a bold, progressive and sustainable mixed use development, the delivery of an alternative development approach would be unlikely to realise the full potential of the site and the strategic policy objectives. The opportunity to deliver comprehensive and enduring socio-economic benefits would be significantly reduced.

Table 7.1 Regeneration Outputs

Objective	Indicator	Outputs	Comments
To bring back to beneficial use underutilised land.	Hectares of land improved	140 ha	Incorporates entire site area.
To provide a range of new economic opportunities.	Hectares of new employment land created	31 ha	Includes components classified as employment, strategic employment and community based business space.
To provide new public open space.	Hectares of new public open space created	30 ha	Landscaped areas, open space, sports pitches and external exhibition space.
To provide a range of new economic opportunities.	Sqm of new commercial floorspace created	145,000 sqm	Includes office (55,000sqm), industrial (62,000sqm), retail/entertainment (19,000sqm), hotel (10,000sqm)
To extend the choice of living opportunities.	Number of new dwellings constructed Integrated housing Social housing	1,000 units	Integrated and social housing will promote objectives of inclusion and equality
To attract new private sector investment into Northern Ireland.	Private Sector Investment secured	TBC	Includes private sector commercial and residential development including office, industrial, retail/entertainment, hotel
To provide a range of new economic opportunities.	New jobs created	6,000	Gross on site jobs. Split by office (2,750), industrial (1,800), retail/entertainment (600), others including sports / leisure / culture / exhibition (850)



## IMPLEMENTATION & DELIVERY

- 8.1 The Masterplan incorporates a comprehensive package of projects that could be delivered over the next 5 – 15 years subject to government agreement. It would provide the basis for the coordination of future development proposals and investment but also provides flexibility in relation to changing conditions over time and would be subject to review.
- 8.2 A number of principles underpin the delivery of the Masterplan:
- The design of new development and the implementation of the vision for the Maze/Long Kesh must be approached in a comprehensive way whilst allowing development proposals to come forward on a phased basis;
  - The promotion of sustainable and innovative building technologies;
  - The need to stimulate private sector investor confidence;
  - The provision of new infrastructure, in particular highway improvements, new/ improved linkages, public transport improvements, public realm, car parking and open spaces is fundamental to achieving the strategic objectives for regeneration of the site and must be secured;
  - Development and public realm proposals must be of the highest design quality;
  - Future management and maintenance of the public realm must be secured. There would be a requirement for high quality landscaping and the establishment of a palette of high quality materials and street furniture; and
  - Development would be phased over time depending upon the timescale for bringing forward development projects.
- 8.3 This section considers a number of key issues relating to implementation and delivery and sets out the recommended next steps in taking the project forward. Issues examined relate to:
- Project costs and affordability

- Risk
- Delivery mechanisms
- Planning Strategy
- Programme

### PROJECT COSTS AND AFFORDABILITY

- 8.4 An outline financial analysis has been undertaken by Grant Thornton addressing the following issues:
- Minimising costs to the public purse;
  - Maximising private sector leverage;
  - Maximising the development value of the entire site.
- 8.5 The estimated costs and values provided within this report are very high level and provide an indication only of the likely broad order of potential costs of construction elements within the scheme. The financial analysis includes a number of assumptions and exclusions, and none of the figures shown should be taken as more than an early and indicative approximation of potential costs.
- 8.6 The figures presented in this report should be of some guidance in helping to make an informed view of the potential regeneration but should not be taken more than illustrative. Further substantial assessment and scheme development would be required in order to review and refine costs. If affordability constraints were to become an issue going forward, certain elements of the project would have to be re-assessed. The overall project cost is therefore not fixed and sensitivity analysis has been undertaken on a number of variables in order to consider the possible impact on affordability.
- 8.7 It should be noted that the outline financial analysis considers capital costs and likely land values only. A full economic appraisal will also be required to consider the operational viability of the proposals and test any assumptions as to ongoing revenue subsidies.

### CAPITAL COSTS

#### Masterplan Base Case Capital Costs

- 8.8 A summary of the preliminary capital costs estimates for the project which have been prepared on the basis of the masterplan is provided in Table 8.1. The figures presented in this table form the base case for the capital costs of the project and do not include any provision for build cost inflation, future costs, optimism bias, finance costs or VAT.
- 8.9 The following assumptions have been applied in preparing the preliminary cost estimates:
- Transportation infrastructure requirements are based on traffic modelling undertaken to date and are subject to confirmation through a detailed Transport Assessment;
  - No allowance has been included for potential land acquisition costs associated with highway works/ transportation infrastructure;
  - Strategic site infrastructure comprises works required to provide serviced sites for sale;
  - Subject to the appropriate business plans, provision has been included for the construction of a 42,000 seat stadium, and a new build facility of 2500 sq m as part of the International Centre for Conflict Transformation.
- 8.10 The preliminary capital cost estimates have been broken down into a number of key categories. Based on this analysis, site preparation, services infrastructure and strategic site infrastructure costs represent some 15.8% of total costs and transportation (access/ highway works and public transport infrastructure) some 27.7%. The capital works projects, including site parking represent some 56.5% of the total capital costs.
- 8.11 The capital cost estimate for stadium designated parking in Phase 2 may be reduced if it is demonstrated that through the delivery of an integrated public transport programme, there is no requirement for replacement decked parking at this stage to serve the stadium.

Table 8.1 - Summary Capital Costs

Preferred Scenario	Phase 1 (pre 2015) (£000's)	Phase 2 (post 2015) (£000's)	Total (£'000s)	% Total capital Costs
Capital Costs	(£000's)	(£000's)	Total (£000's)	(%)
Site Preparation / Reclamation	5,600		5,600	2.2%
Services Infrastructure	19,000		19,000	7.4%
Strategic Site infrastructure	4,456	1,114	5,569	2.2%
Parkland	3,325	3,325	6,650	2.6%
Transportation	64,510		64,510	25.2%
Stadium, external works and pitches	90,655		90,655	35.4%
ICCT	10,213		10,213	4%
Community	623	1,157	1,780	0.7%
Stadium Designated Parking	3,456	16,500	19,956	7.8%
Coach Parking	281		281	0.1%
Temporary Parking	3,970		3,970	1.6%
Park & Ride Facility	4,550		4,550	1.8%
<b>Sub total for Capital Costs</b>	<b>210,638</b>	<b>22,096</b>	<b>232,734</b>	<b>90.9%</b>
Professional Fees (7.5%)	15,798	1,657	17,455	6.8%
Overall Contingency (2.5%)	5,266	552	5,818	2.3%
<b>Total for Capital Costs</b>	<b>231,702</b>	<b>24,305</b>	<b>256,007</b>	<b>100%</b>

## DEVELOPMENT VALUE

- 8.12 Table 8.2 sets out the anticipated land values generated under the Masterplan. These figures assume land value inflation equal to Retail Price Index (RPI) and do not allow for additional growth factors.
- 8.13 In making estimates regarding potential development values, it has been assumed that the release of land for development takes place in parallel with completion of the Stadium and the International Centre for Conflict Transformation. The caveats relating to planning and in particular, the policy considerations relating to any significant residential development in the longer term (as set out in Section 2 of this report) must be noted in this respect. It is anticipated that some residential development (in the region of 200 units) may be acceptable as enabling development under the current BMAP in the period up to 2015. This advice has been taken into account in the anticipated land values potentially generated by development of the site in the period up to 2015 which are presented in Table 8.2.
- 8.14 In the longer term, any significant housing development would be dependent on the outcome of a review of planning policy. Therefore whilst it may be possible that further residential development might be permitted following longer term plan review, it is considered premature to make allowance for this in the Masterplan or in estimating land values in advance of the outcome of this review. As a result, a future-use reserve area of approximately 25.72 hectares (63.55 acres) has been identified and no value has been assigned to this land area in the estimated land receipts set out in Table 8.2. The future use of this land post 2015 would be determined as part of the review of the Masterplan in the context of the review of the BMAP and planning policy at that time.
- 8.15 As highlighted by the Maze Consultation Panel, it is widely recognised that the long-term delivery of such a large scale site development, particularly in relation to maximising value

for money for the public purse, would require the long term investment and skills of the private sector. Given that the current planning policy framework covers the period up to 2015, it is clear that no assumptions can safely be made with regard to the development potential of the Maze/Long Kesh site beyond this date. However, any potential private sector development partner would, as part of normal business practice, take a long-term view of this development "risk". The long term potential of the site and the infrastructure capacity provided by the pre-2015 Phase 1 development are therefore key factors that the market would need to assess alongside the planning policies appropriate at the time.

- 8.16 It should be noted that the total land values associated with the development of the whole site over time could therefore be greater than the land values presented in Table 8.2 but that the overall value of the remaining site beyond 2015 would be subject to plan review as set out above. For example, if as a result of plan review longer term residential development of the reserve area is permitted (in the region of 800 units phased over time from 2015), it is estimated that this could increase land values by £45.2 million from £54.8 million to £100 million.

**Table 8.2 - Anticipated land values**

Preferred Masterplan	Site area	Site area	Value per hectare	Value per acre	Phase 1 (pre 2015)	Phase 2 (post 2015)	Total
	(Hectares)	(Acres)	(£'000s)	(£'000s)	Likely land receipt (£'000s)	Likely land receipt (excluding reserve area) (£'000s)	
Main stadium - hotel only				-	8,000	-	8,000
Exhibition halls	18.319	45.265	494.19	200.00	9,053	-	9,053
Offices	6.800	16.802	1,111.93	450.00	823	6,738	7,561
Retail	1.598	3.949	773.41	313.00	1,236	-	1,236
Entertainment	0.852	2.106	513.96	208.00	236	202	438
Light industry/research/business	16.099	39.780	741.29	300.00	2,754	9,180	11,934
Residential	5.714	14.120	1976.90	800.00	11,296	-	11,296
			<b>Sub - total</b>		<b>33,398</b>	<b>16,120</b>	<b>49,518</b>
Retail and Entertainment within stadium			-	-	2,650	-	2,650
Other lettable space within stadium			-	-	2,650	-	2,650
			<b>Total</b>		<b>38,698</b>	<b>16,120</b>	<b>54,818</b>

### BASE CASE AFFORDABILITY ESTIMATE

8.17 By combining the output from the construction cost and land values data, an estimate of the likely funding gap has been provided. Table 8.3 provides an initial indication of the affordability gap based on current information and not considering or taking account of any allowance for the potential land values associated with the reserve land which may come forward for development post 2015. These figures exclude provision for future life cycle costs, optimism bias, finance costs and VAT. The base case also assumes build cost inflation and land value inflation equal to Retail Price Index (RPI) with no additional growth factors included. On the basis of this calculation, the estimated affordability gap is £201.2 million.

**Table 8.3 - Masterplan base case affordability position**

	PHASE 1	PHASE 2	Total
	(£000's)	(£000's)	(£000's)
<b>Total Land Receipts</b>	38,698	16,120	54,818
<b>Total Capital Costs</b>	(231,702)	(24,305)	(256,007)
<b>Funding Gap</b>	<b>(193,004)</b>	<b>8,185</b>	<b>(201,189)</b>

8.18 If as a result of plan review in the context discussed earlier, longer term residential development is permitted post 2015 (eg 800 units to be phased over the plan period from 2015), the additional land receipt of £45.2 million generated could reduce the funding gap from £201.2 million to £156 million.

### SENSITIVITY ANALYSIS

8.19 An initial assessment has been made of the likely impact of applying factors such as nominal build cost inflation, nominal land inflation, optimism bias on Masterplan costs and potential for further residential development post 2015. Table 8.4 sets out a summary of the scenarios and sensitivities undertaken on the base case model considering the impact

of construction inflation, land inflation and optimism bias being applied at the same time. Application of different assumptions lead to variations in the affordability gap.

8.20 The sensitivity analysis has been undertaken utilising the base case model without any allowance for residential development post 2015 and with zero construction inflation; zero optimism bias and zero land value inflation. The following factors were then applied:

- Add construction inflation over base case: 6% per annum (to be subject to further testing in next stage of financial appraisal)
- Optimism Bias uplift factor: 41% of Capital Costs
- Add land value inflation over base case: 6% per annum

8.21 The sensitivity analysis highlights the need for proactive management of the financial aspects of the project. On a scheme of this size, very minor variations can have a significant impact. In particular the time value of money plays an important role.

### NET IMPACT OF SENSITIVITIES

8.22 As Table 8.4 demonstrates, the inclusion of construction inflation, and optimism bias into the model increases the affordability gap. However by including land value inflation, some of this increase is off-set by increased land value, resulting in a net affordability gap of £317.7 million. Figures on the Net Present Value (NPV) impact of sensitivities are presented in the main Financial Report prepared by Grant Thornton.

**Table 8.4 - Net impact of sensitivities at March 2007 prices**

	Income (£000's)	Potential Expenditure (£000's)	Net Funding Gap (£000's)
Base Case (A)	54,818	(256,007)	(201,189)
Construction Inflation (B)		(47,121)	(248,310)
Land Value Inflation (C)	27,103		(221,207)
Optimism Bias (D)	-	(96,511)	(317,718)
VAT	-	-	-
<b>NET Position (A+B+C+D)</b>	<b>81,921</b>	<b>(399,639)</b>	<b>(317,718)</b>

8.23 If as a result of plan review, in the context discussed above, longer term residential development is permitted post 2015 (eg 800 units to be phased over the plan period from 2015), the additional land values generated would reduce the net funding gap to £197.3 million.

8.24 A potential opportunity exists to explore for further illustrative purposes the impact on the affordability gap of increasing the level of residential development over the very long term (eg to 2045) subject to the outcome of plan review. For example a further 300 residential units (giving a total indicative figure of 1300 units) would result in an additional income of £17 million nominal and £2.4 million in NPV terms based on the assumption that 200 units would be sold in 2038 and an additional 100 units sold in 2045.

### OPTIMISM SENSITIVITY

8.25 The creation of the Base Case Masterplan has been an iterative process. Costs and values provided within this report are high level and provide an indication of the likely order of costs for construction elements within the scheme. If affordability constraints were to become an issue going

forward, certain elements of the project would have to be re-assessed. In order to further address the sensitivity of the current capital costs and land values, an optimism sensitivity has therefore been performed.

8.26 The optimism sensitivity test provides an illustration of how changes in the key areas of construction costs and land values can impact on the affordability gap. It provides an indication of the variables that would need to be further assessed as the scheme progresses.

**CAPITAL COSTS**

8.27 It has been agreed in principle that the Phase 2 construction costs may be reduced if it can be demonstrated to the satisfaction of the Roads Service that through the delivery of an integrated public transport programme, the level of stadium car parking could be reduced and the requirement for decked parking to serve the stadium could be eliminated (a potential saving of £16.5 million from the base case capital cost estimates). The estimated capital costs would fall from £256 million to £237.9 million (see Table 8.1) once the associated professional fees and contingency are taken into consideration.

**LAND VALUES**

8.28 As part of the optimism sensitivity, potential land receipts have been reviewed in order to establish any potential for an increase in receipts.

8.29 The potential increase in receipts has been forecast at approximately £3.5 million in non discounted terms thus raising the total land receipts figure to from £54.8 million to £58.3 million (excluding any consideration of possible residential development post 2015). This is based on the higher value per acre estimates set out in Table 8.5. If allowance is included for potential residential development post 2015 (subject to the outcome of plan review in the

context discussed above), the total land receipt would be increased by £9 million from £100 million to £109 million.

**Table 8.5 - Breakdown of revised optimism analysis land 'value per acre' estimates**

	Base Case Value per acre (£000's)	Optimism Analysis Value per acre (£000's)
Offices	450	500
Retail	313	344
Small business units	210	250
Residential	800	900

8.30 The review of land values has been based on the following commercial assumptions. These should not be confused with any assumptions made on the figures included in the Masterplan base case.

- Slight increase in development density for offices, retail and business units to a level that maintains a good standard of environment and in keeping with the ethos of the development;
- Optimistic view of residential land values by facilitating elements of high density and removing the risk of clawback / gain share from developers;
- Increased developer confidence in the Maze/Long Kesh; and
- Appropriate phased release of land areas such that the market is not depressed by too great an area of land becoming available too soon.

**SUMMARY**

8.31 Table 8.6 summarises the Masterplan Base Case sensitivity analysis which includes allowance for optimism bias and

construction cost and land value inflation (but excludes any allowance for potential residential development post 2015). Under the Masterplan Base Case sensitivity model, the financial appraisal has shown that the net affordability gap would be £317.7 million.

**Table 8.6 – Summary of Affordability Analysis (at March 2007 prices)**

	Income (£000's)	Potential Expenditure (£000's)	Net Affordability Gap (£000's)
Base case (Table 8.4)	81,921	(399,639)	(317,718)

8.32 However, active management of the factors within the sensitivity could reduce the affordability gap position indicated in Table 8.6. For example, a rigorous and proactive approach to the risk management of the development could reduce the optimism bias value associated with the projected capital costs. The delivery of an integrated public transport programme could reduce the need for on site stadium parking and the associated capital costs of construction of decked parking. The optimism sensitivity test has also demonstrated the potential impacts of changes in land values over time.

8.33 The longer term development potential of the site would be of particular significance to the affordability gap over time. This would only be determined through plan review and it is therefore considered premature at this stage to apply any specific value to the site for any potential long term residential development which would be dependent on the outcome of this review. However, if residential development were to be permitted post 2015 following plan review (eg 800 units to be phased over the next plan period from 2015), the affordability gap could be significantly reduced.

## RISKS

- 8.34 The regeneration of such a large and complex site carries with it certain risks which may become apparent as the design development progresses. The following risks have been identified as having a potential impact on the construction costs and land values detailed in this section. The objectives must be to minimise risk through effective project management.
- Inadequate time allocated for Site Reclamation which could lead to cost over-run and construction delay to rest of site;
  - Planning restrictions which may impact on the mix and quantum of development;
  - Lack of cost certainty leading to increased budget pressure;
  - The timing and extent of transportation works and costs;
  - Late delivery of Public Sector financed components leads to delay in Private Sector development and potentially a loss of revenue;
  - Economic conditions harden leading to slower than expected Private Developer uptake of land;
  - A detailed assessment will need to be carried out on land acquisition costs for the construction of the rail link and off-site highway works.
- 8.35 The ability to construct residential units on the site in the period up to 2015 would be required as enabling development and would be fundamental to the viability of the scheme. Any future significant residential development would be dependent on planning policy pertaining at the time and plan review of the Masterplan.
- 8.36 Achieving a balance between the allocation of risk to the private sector and the extent to which the public sector retains control over the pace and direction of the development would be fundamental to the success of the chosen delivery model. Table 7 [not yet provided] provides an initial view on

how risk may be allocated between the public and private sectors across key components of the scheme.

- 8.37 In line with HM Treasury Green Book Guidance, the public sector should not be taking risks if it is possible to transfer risk to the private sector. It is acknowledged, however, that there may be occasions where some degree of risk would need to be retained by the public sector to stimulate market activity.

## DELIVERY MECHANISMS

- 8.38 The regeneration of the Maze/Long Kesh site would be a complex undertaking the risks would need to be appropriately managed and the scheme would be completed over a number of years. The public sector would have a crucial initial role to play in facilitating development but the long-term success of the scheme would ultimately depend on the ability to attract private sector investment and development skills. Therefore a partnership approach between the public and private sectors would be fundamental to successfully delivering the various objectives of the stakeholders.
- 8.39 There are a number of factors that need to be considered in further detail to assist in selecting an appropriate delivery model for the project and within this section we have considered a number of generic potential delivery structures. The examples provided are illustrative and at this stage are intended as initial ideas for consideration. As recommended by the original cross-party Maze Consultation Panel report, as part of the next stage of development of the project a detailed review and analysis would be undertaken to determine the most appropriate delivery mechanism for the scheme, particularly in relation to maximising private sector investment and delivery partnership.
- 8.40 In addition to the key commercial components of the scheme, there are many non commercial drivers on the site that may influence the risk allocation.

- 8.41 There are a range of potential delivery mechanisms available for the scheme including: joint ventures, appointment of a single developer and forming a development company. None of these are mutually exclusive and in practice more than one may form part of the final delivery model.
- 8.42 In starting to assess the appropriate structure for the development, it is important to understand the nature of the activities that would need to be undertaken by the body ultimate responsible for the delivery. These activities are likely to include:
- Undertaking detailed feasibility studies on individual components of the scheme;
  - Preparing the various procurement contracts for the provision of infrastructure, development and disposal of site elements;
  - Negotiating and contracting with third parties and the private sector on specific elements of the scheme; Drawing together the funding package for the scheme from both the private and public sectors;
  - Undertaking the overall marketing and promotion of the site and positively positioning it in relation to the projects. In addition, to attract wider private sector investment into the area.
- 8.43 These services could be provided by a range of models. This spectrum of intervention ranges from a pure public sector model which would deliver all of the services identified above. At the other end, a private sector body could be contracted to undertake these activities.
- 8.44 In between, the range of options is infinite with a range of mixed models which could address the requirements outlined above. In assessing the approach, the following criteria are of importance:
- Ensures delivery of the Governments objectives;

- Manages and if appropriate transfers, the risk of the public sector to the private sector;
- Ensures that the private sector is effectively incentivised to deliver Value For Money for the public sector;
- Ensures that there is sufficient control and influence by the public sector to ensure that non-delivery can be addressed;
- Ensures that the comprehensive development of the site is brought forward and that elements of the project are not 'cherry picked' by the private sector;
- Ensures that the vehicle has the capability and capacity to deliver the project.

8.45 In terms of delivering against the Government's wider strategic objectives, the least attractive option is the straight disposal of different parts of the site to different private sector interests. Whilst the site could be split into discrete development packages whereby private sector developers/ investors could be invited to bid for sites, lead developer role would be essential if the scheme is to be taken forward in accordance with the agreed Masterplan.

8.46 The remainder of this section discusses three of the most common mechanisms used in delivering regeneration schemes, provides some examples and sets out some of the advantages and disadvantages of each.

### **JOINT VENTURE (JV)**

8.47 Joint ventures are an increasingly common feature in the delivery of construction and development schemes. They enable parties to work together using a collective pool of assets to deliver shared objectives and allow the introduction of resources that would not otherwise be available.

8.48 The public sector could build a stake in a joint venture vehicle by using its development land. The land would be sold or transferred to the joint venture vehicle and the proceeds used to build an equity stake.

8.49 The private sector could also provide funding into the vehicle and would be obliged to deliver infrastructure and development in accordance with the agreed Masterplan.

8.50 An example of this arrangement is 'Meridian Delta Ltd (MDL), a JV arrangement established to deliver the 'Greenwich Peninsula Regeneration Scheme' which incorporates 10,000 new homes, new office and retail space, the millennium dome and a new arena over a 20 year regeneration period. The advantages of this approach include the ability to secure a long term commitment by the private sector to secure regeneration on the site and a depth of expertise in dealing with these forms of mixed development.

8.51 However, where there are issues of non-performance these arrangements can be hard to unravel especially where other contractual commitments have been entered into. Note that a JV would be in the private sector so long as the controlling interest does not lie with the government.

### **SINGLE DEVELOPMENT CONTRACT**

8.52 Delivery of urban regeneration projects under a development agreement is a widely used arrangement which brings together all parties with a material interest in the development under a formal legal agreement that clearly defines the role and responsibilities of the parties.

8.53 This would involve a single developer taking responsibility for delivering all elements on the site. The developer would take the risk on delivering the stadium, infrastructure and associated development packages in exchange for either the freehold or a long-term interest in the site.

8.54 The developer is likely to seek a contribution from the public sector to deliver the stadium and associated infrastructure.

8.55 An example of this arrangement is the Silvertown Quays development. Master developers were appointed on a £1.5

billion project to deliver residential, commercial, leisure and community facilities. Under this approach, the public sector sets out through the master developer agreement the basis upon which the scheme should advance and the phasing around it. In return it allows the developer to work up the detailed feasibility of the site and to prepare land for sale that would be used to cross subsidise the wider development. Such an approach relies on the market responding positively and it not being subject to change. In addition, these types of arrangements can include performance measures and step in rights in favour of the public sector.

8.56 Advantages of the development agreement include:

- Widely used approach that is relatively straightforward and easy to understand;
- Clear roles and responsibilities for parties involved;
- Provides the private sector with the framework that offers flexibility to take commercial decisions.

8.57 However, as noted above the development agreement does not naturally promote commonality of purpose and clear development agreements are required to avoid contractual disputes. In relation to the Maze/ Long Kesh site, the public sector would need to clarify the precise time and cost delivery commitments around the stadium, associated infrastructure and other key public elements required.

### **URBAN REGENERATION COMPANY**

8.58 The creation of a Maze/Long Kesh Regeneration Company specially formed for the purpose of regenerating the site is another delivery option.

8.59 The urban regeneration company would be formed from key parties with a major interest in the development and empowered, through the drafting of Memorandum of Agreement and Articles of Association, to deliver the project. Consideration would need to be given to the

drafting of a members' agreement that details the range of powers and specific requirements or relationships that are associated with the company or provided by members of it e.g. planning, land vesting, obtaining grants etc.

8.60 The company would be seeking to secure private sector finance and expertise into areas where they can make the most significant contribution. It would also be important to strike the right balance between risk transfer to the private sector and public sector control over the development.

8.61 An example of this arrangement is the urban regeneration company 'Sheffield One' which was launched in February 2000 to develop a focused integrated regeneration strategy for Sheffield City Centre. Sheffield One is a partnership of Sheffield City Council, English Partnerships and Yorkshire Forward (the regional development agency for Yorkshire and Humber). The Ilex Urban Regeneration Company for the Derry city council area is another example.

8.62 These types of agencies have the ability to look at the wider strategic vision for a city or region. In addition, their connections with public sector agencies can support the advocacy case for funding and in managing the wider public interest. However, in taking schemes forward, they generally lack real delivery capability and would rely on the private sector to bring forward schemes on their behalf. They can also be bureaucratic and lack the necessary speed and flexibility required in terms of strategic decision-making processes. Advantages of the urban regeneration company approach include:

- Encourages greater focus on the business plan and achieving goals;
- Greater focus on branding/marketing and dealing with enquiries;
- Can enter into contracts in its own right;
- Can improve access to skills and resources of private

sector partners e.g. finance;

- Can allow better management of risks and can be used to limit the liabilities of the public sector;
- Enables the contribution of dedicated services/ infrastructure from members for the good of the project.

### ASSESSMENT OF OPTIONS

8.63 It is important that an appropriate appraisal and study of options is undertaken to consider potential options and help develop a value for money solution that meets the objectives of government action. HM Treasury guidance recommends that prior to selecting a delivery vehicle, a public sector body must have conducted a thorough analysis, including policy, value for money and commercial considerations and appraisal of alternatives.

8.64 A key aspect for the public sector to consider is the definition of risks to be retained and the need to establish responsibility for managing those risks. Timely provision of information, contingency planning and an awareness of opportunities would be crucial. It would be equally important that the individuals involved in any negotiations on delivery structure from the public sector have the appropriate commercial skills and experience, or access to those skills through advisers, together with clarity over responsibilities and a well thought through incentive structure. In this instance, the involvement of the SIB in the Maze/ Long Kesh initiative can provide a useful skills basis to begin the process.

8.65 In taking the Maze delivery options forward, the client group would need to consider how any model effectively addresses these criteria. This can be undertaken once a clear forward route has been defined. However, at this stage, any (or a combination) of the models outlined above could be appropriate for the site.

### FUNDING

8.66 The funding options for the project can be sub-divided as follows:

#### PUBLIC SECTOR FUNDING:

- Upfront investment (e.g. "pay as you go" - milestone payments for design and build contract);
- Investment over time (e.g. deferred payments such as PPP contract).

#### PRIVATE SECTOR FUNDING:

- Upfront investment (e.g. acquisition of land / assets for upfront payment and / or developer contribution);
- Investment over time (e.g. gainshare / overage arrangements).

#### GRANTS:

- Investment that is neither commercial sector nor - government funded but "quasi-public sector" - e.g. charitable donations, endowments, Big Lottery funding etc.

8.67 These funding alternatives may be mixed in terms of timing and proportionality. In addition, determining the most appropriate type of funding would be heavily influenced by the nature of the asset. For example, private sector funders would look closely at:

- The purpose of the asset and therefore the expected risks and rewards. As has been shown in the PPP / PFI industry, assets with a predominantly social or cultural purpose elicit a different kind of funding response from those with a predominantly economic or commercial purpose;
- The size of the asset and therefore the quantum of funding required; and
- Precedent (or lack of it).

### **OPTIMAL FUNDING MIX**

- 8.68 A mix of private and public sector funding for this scheme is highly likely. Given the wide range of social and public policy objectives, a purely private sector funding solution is unlikely to represent value for money, whilst equally, there are purely commercial elements of the project which should not require public sector funding at all.
- 8.69 The appropriateness of private sector funding for elements of the scheme has been assessed. Subject to plan review the output from this analysis suggests that 'Residential' and 'Commercial' are components that could be taken forward under private finance, but this would be subject to the public sector servicing the site beforehand. In addition the Stadium may be able to attract an element of private funding. Key considerations relating to funding are set out in Table 8.7.

**Table 8.7- Key considerations around funding approach**  
Source: Grant Thornton, 2006

Site component	Public		Private		Key considerations
	D&B contract	PPP	Upfront	Over time	
Site preparation, infrastructure and transportation	✓	✓			<p>Unless there is evidence that the private sector is willing to assume full responsibility for developing this site, this would appear to be a predominantly public sector funded component.</p> <p>The desirability of the site does not appear to be such that it would attract significant interest in its raw state. The public sector would therefore need to put in place the enabling works to make it a viable commercial option.</p> <p>There may be scope for PPP funding structures, but only on value for money grounds through a comparison of available procurement options.</p> <p>If a development company / joint venture approach is adopted, financing for these elements could be by way of equity or interest-bearing subordinated debt where it was felt that the public sector could / should be seeking repayment of initial funding from later stages of the development.</p>
International Centre for Conflict Transformation	✓				<p>Assuming the case for the International Centre for Conflict Transformation is robust, it should attract significant international interest. A project of this type will require significant public capital subsidy. Private Sector funding could be by way of donations or grants - from individuals and businesses, which may well see benefits in associating with the ICCT, particularly if they have a major base in the region.</p> <p>May be academic links if the Centre can establish itself as a centre for Peace Studies. It could also establish a mixed and international programme of fund raising for project.</p>
Stadium	✓				<p>Most projects of this type require significant public capital subsidy. However, a fixed price design and build contract or equivalent and close linkage between design and financial factors to minimise scope creep and performance based payment may be appropriate to minimise that element of public subsidy. On-going private management and operation is clearly a strong and desirable possibility.</p> <p>As an industry standard norm, the three sporting associations, who would be the key tenants, would be required to commit to long-term usage agreements to effectively anchor the development. However, there would clearly be significant additional commercial opportunities from maximising utilisation of the Stadium asset.</p> <p>It would be desirable to build in flexibility to take advantage of these opportunities but a structure with a guaranteed minimum level of funding and an incentive on a PSP or a joint venture partner to seek additional commercial revenues could work.</p> <p>Structured appropriately, the private finance attracted to this project should offer relatively high leverage and low risk.</p>
Commercial and residential			✓	✓	<p>Having obtained planning permission for residential development, it is presumably in the interests of the development company to manage the building programme.</p> <p>However by selling large parcels of land for residential development there is a risk of developers taking and holding this land in their land banks, whereas the development company is likely to want to see "critical mass" build up to a predictable programme. This suggests a joint venture where public and private sector partners work together to optimise the flow to market.</p> <p>Commercial development values around the site would be directly enhanced by the main stadium development and the residential elements. The key driver for the commercial must be to maximise value that can then be ploughed back into the project or distributed to stakeholders to the extent that they have funded early development.</p> <p>The private finance attracted to the project is likely to be developer finance, seeking relatively high property-based risks and rewards.</p>

**GRANT FUNDING**

8.70 Potential public sector grant funding may be available for different elements of the Maze/ Long Kesh development programme such as the International Fund for Ireland.(Economic Development Fund, Sharing this Space) and EU structured funds. EU project funding schemes are grouped together under a programme entitled peace II which is currently administered by the Lisburn Partnership. The project may be eligible under Social Integration, Inclusion and Rehabilitation and Section 3: Locally Based Regeneration and Development Strategies. As with all of the identified funding schemes, Peace II is subject to application deadlines that would fall in the near future. Invest NI can only provide financial assistance to its client companies. Capital investment projects promoted form outside this client base cannot attract funding from Invest NI.

**PLANNING ISSUES AND STRATEGY**

8.71 The planning strategy for the development of the Maze/ Long Kesh site and other planning-related issues addressed in this report have been informed by a number of helpful discussions with the Planning Service. These discussions were conducted wholly without prejudice to the Planning Service's formal position on the issues, given its regulatory role currently and in due course.

- 8.72 The proposed Planning Strategy involves:
- Preparation of overall Masterplan to provide context for planning applications for individual projects to be considered;
  - An application for full planning permission for the Stadium and all external road works; and
  - Separate planning applications for other development projects.

8.73 An application for outline planning permission for the Maze/ Long Kesh site should be considered for the development

intended up to 2015. This would establish authority for the totality of the project under a process that would assess the full impacts of this project of regional significance and demonstrate how the regeneration objectives for the site as a whole are to be achieved.

8.74 Planning applications would need to be accompanied by full Transport Assessment and Environmental assessments. Planning Service advise that major applications are likely to be considered by Planning Service under the Article 31 procedure.

8.75 The red line boundary defining the scope of the outline application would not cover the full Maze/Long Kesh site. It would exclude any consideration of lands (identified as Phase 2 development) which may at some point in the future be considered for development including for residential housing, following plan review. It would embrace all other uses proposed in the Masterplan including the employment and commercial uses and show how development would be phased.

8.76 The outline planning application should be submitted at the same time as the full planning application for the stadium and infrastructure works, and the planning application for the International Conflict Transformation Centre. It should be accompanied by a supporting statement and environmental statement (ES) which would refer to an element of housing comprising a stated maximum of 200 houses. . It can be expected that no more than 200 units would be permitted by condition on this planning permission. The outline planning application can be expected to refer to a broad zoning plan rather than the Masterplan which would be submitted purely as supporting illustrative documentation, primarily to inform full and proper assessment of environmental impacts. The housing element would be accompanied by a concept master plan to comply with planning policy statement PPS7.

8.77 Subsequent applications for specific development projects would be submitted as and when necessary or appropriate in accordance with the overall Masterplan.

8.78 Separate Environmental Statements and Transport Assessments would be submitted for the stadium/road works, the International Conflict Transformation Centre application, and the outline application for full site development although there would clearly be overlap between these documents.

8.79 It is recommended that allowance is made for a 54 week period for the processing of the planning application for the stadium and related infrastructure. The application(s) for stadium and highways could be considered in tandem. A shorter period may be achievable if there are no objections. This timescale is dependent on close working in advance with the Planning Service and other relevant agencies in preparation of Transport Assessment and Environmental Statement. The first step in the process would be to invite Planning Service to embark on a formal process of scoping the environmental impact assessments for both the stadium/ road works full planning application, and the separate outline planning applications for the project as a whole – this would involve round table meetings with consultees.

8.80 Provided the application is presented in the manner outlined above, it is considered that the proposed development would be considered to be in accordance with current planning policy and would not conflict with the BMAP process.

8.81 It would be critically important to manage the statutory processes to ensure approvals are delivered in time to meet programme milestones.

**LAND ACQUISITION**

8.82 The development of the Maze/Long Kesh would require off-site infrastructure works which would require land

acquisition. This may require the use of compulsory purchase powers. Powers and timescales in relation to CPO are set out in Figure 8.1..

Figure 8.1: Compulsory Acquisition - Procedure

Unspecified time	<p>First Publication of notice of the Office's intention to acquire the land compulsorily</p>
One month minimum (period will be extended if local enquiry is held)	<p>Second publication of notice of office's intention to acquire the land compulsorily</p> <p>The Ministry considers –</p> <p>1. Considers all representations made by an interested Party; and</p> <p>2. After causing a local enquiry to be held by the planning appeals Commission or by any other person (unless no representations have been made, or any representations have been met or withdrawn or relate solely to the amount of compensation or are representations which the Ministry is satisfied are solely of a frivolous or fixatious nature....</p>
ASAP	<p>Ministry may make a vesting order or refuse to make the order.</p>
One month (period will be extended if there are ongoing legal proceedings)	<p>Office shall publish a notice stating that a vesting order has been made, identifying a place where a copy of the vesting order can be seen at reasonable notice and shall serve a copy of the notice on every person who, having given notice to the Ministry of his objection to the application of the vesting order, appeared at a local enquiry in support of his objections.</p>
	<p>Any person aggrieved by a vesting order who wants to question its validity, within one month from the date of publication of the notice making a vesting order may make an application to the high court. The court may (i) make an interim order suspending a vesting order (ii) quash a vesting order or (iii) dismiss the application.</p>
	<p>One month after date of publication of notice of making the vesting order, the vesting order becomes operative, subject to any ongoing legal proceedings..</p>

## RELEVANT SITE

8.83 Once it has been established that the site in question is "a relevant site" as defined within the legislation then certain powers are triggered for the office of First Minister and Deputy First Minister ("Office"). The Maze/Long Kesh site falls within the definition of "relevant site" set out in Article 9 and therefore the relevant powers are triggered. Under Article 12 the Office may acquire land by agreement or compulsorily where the land is: -

- (a) adjacent to a relevant site or is acquired by the Office for purposes connected to the discharge of its functions in relation to the site; or
- (b) required to provide or improve access to a relevant site.

8.84 Where land is acquired by the Office under paragraph 1 in connection with a relevant site, that land is taken to form part of the relevant site for purposes of part III of the Strategic Investment and Regeneration of Sites (Northern Ireland) Order 2003 ("SIRS").

## SCHEDULE II – PART I – ACQUISITION OF LAND BY THE OFFICE 1. Compulsory acquisition – vesting orders.

8.85 Powers in relation to the compulsory acquisition of land under paragraph 1 and the powers of entry in connection with the acquisition of land under paragraph 1 are contained in schedule I parts I and III. Where the Office proposes to acquire land compulsorily it may make an order vesting the land in the Office ("vesting order"). This power includes the power to create and vest in the Office new rights over the land as well as to vest in the existing rights.

8.86 The power to make a vesting order in respect of land: -

- (a) which is the property of any statutory body which has the power under any statutory provision to acquire land compulsorily; or

(b)which is declared by or under any statutory provision to be inalienable, shall not, where representations objecting to the proposal for making the order have been duly made by the owner of the land and have not been withdrawn, be exercised in relation to that land unless the proposal for making the order has been approved by a resolution of the Assembly. The acquisition of any land of an industrial undertaking is not authorised if that land is being used for the purposes of that undertaking. This applies to an undertaking which provides employment which is substantial having regard to the extent of the land used for its purposes and the nature of the undertaking. The acquisition of land on or in which there is, to the knowledge of the Office, any historic monument or archaeological object shall not be authorised without the consent of the Department of the Environment.

## PROGRAMME

- 8.87 The 2012 Olympics and Paralympic Games provide the opportunity for Northern Ireland to participate in these events subject to completion of the stadium by Summer 2011. Whilst this is not critical to the proposed development, it provides a significant opportunity and a catalyst for regeneration which would be lost if construction were to be delayed. Ministers have confirmed the possibility of the stadium hosting a number of matches as part of the Olympic Football Tournament.
- 8.88 The outline programme has therefore been prepared to show how construction of the stadium and associated off-site infrastructure could be completed within this period. Whilst this presents a challenging programme, it is considered that it is achievable if early decisions are taken to advance the next stage of technical, planning and design work and appropriate long term management and delivery arrangements are firmly established.
- 8.89 The outline programme for the International Centre for Conflict Transformation and the stadium and highways infrastructure is set out in Figures 8.2 - 8.4.
- 8.90 If the project is to move forward, it would be necessary to commence work on the following key tasks by mid 2006 with the objective of moving towards the possible submission of planning applications in 2007. This would assist in the development of a detailed Business Case which would assist the decision making process.
- Development and refinement of Business Plans for Stadium and International Conflict Transformation Centre
  - Formal process of scoping the Environmental and Transport Assessments with Planning Service and Roads Service
  - Sustainability and use of renewables feasibility study
  - Topographical site surveys
  - Preparation of Traffic Model
  - Baseline work for Environmental and Transport Assessments including necessary survey work
  - Development of Transport Strategy including public transport with Roads Service and Department of Regional Development in consultation with Translink
  - Design of off-site infrastructure works and confirmation of land take requirements/ preparation of draft orders
  - Identification of preferred delivery mechanism and more detailed market testing/ partner testing
  - Appointment of Design Team for stadium/International Conflict Transformation Centre through OJEU process
  - Design of on site roads and landscaping
  - Design and procurement of WwTW (with water Service)
  - Design and procurement of on-site service infrastructure
  - Negotiations with RUAS and other potential occupiers (eg via Invest NI)
- 8.91 In meeting the requirements of the programme, there would be a requirement for an overall project management system that ensures that key programme milestones are met. In addition, it would be necessary to work closely with relevant Government Departments and statutory service providers to ensure that project milestones can be delivered.

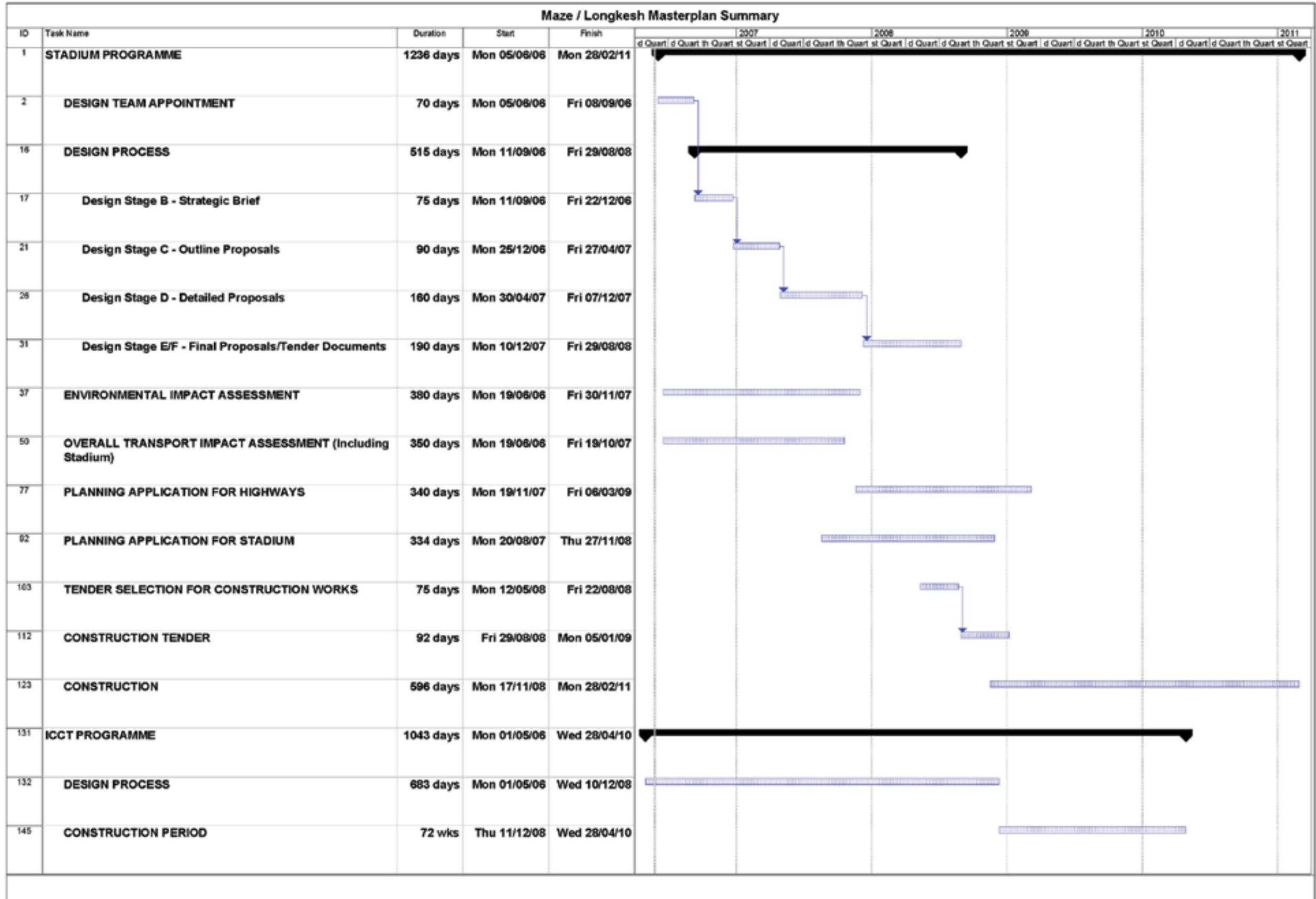


Figure 8.2: Maze / Longkesh: Summary Programme

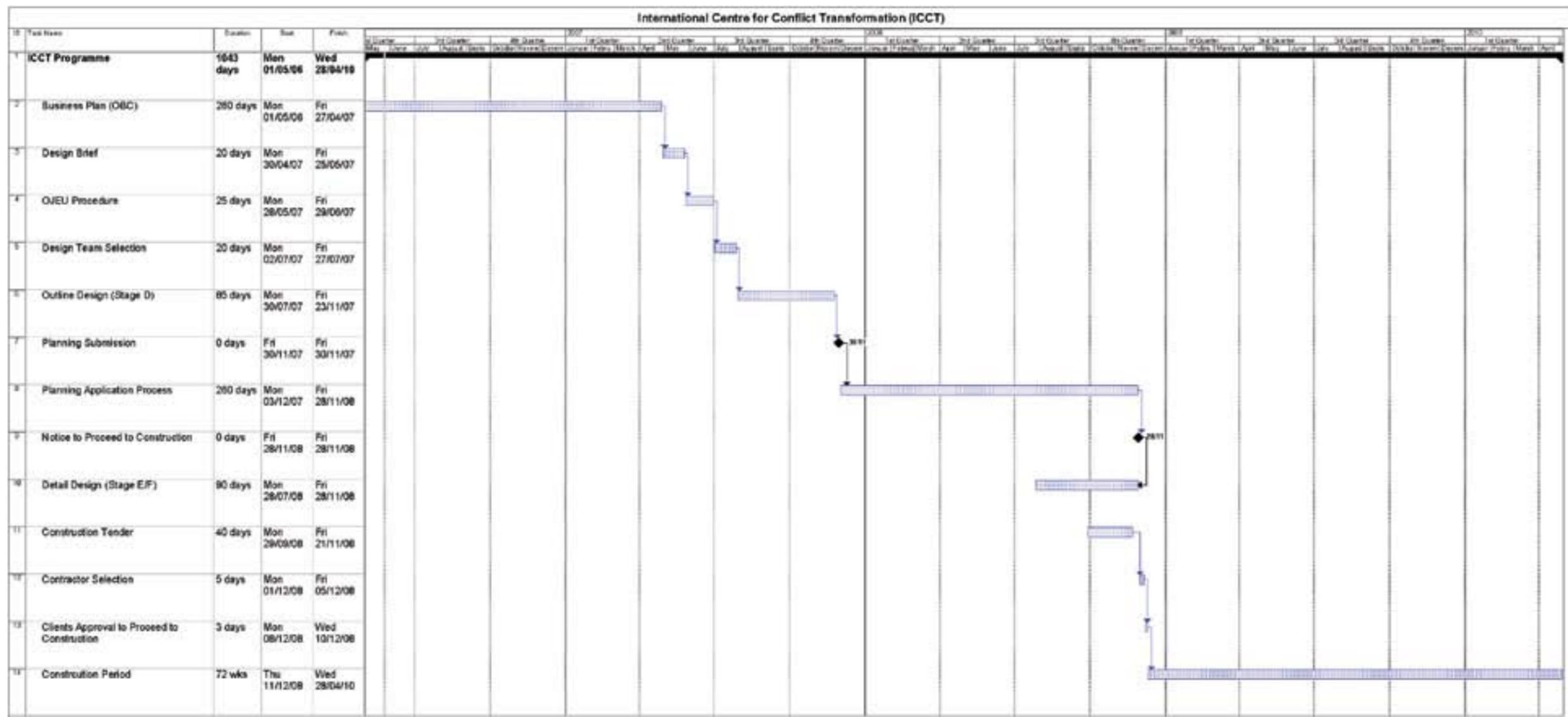


Figure 8.3: Maze / Longkesh: International Centre for Conflict Transformation Programme

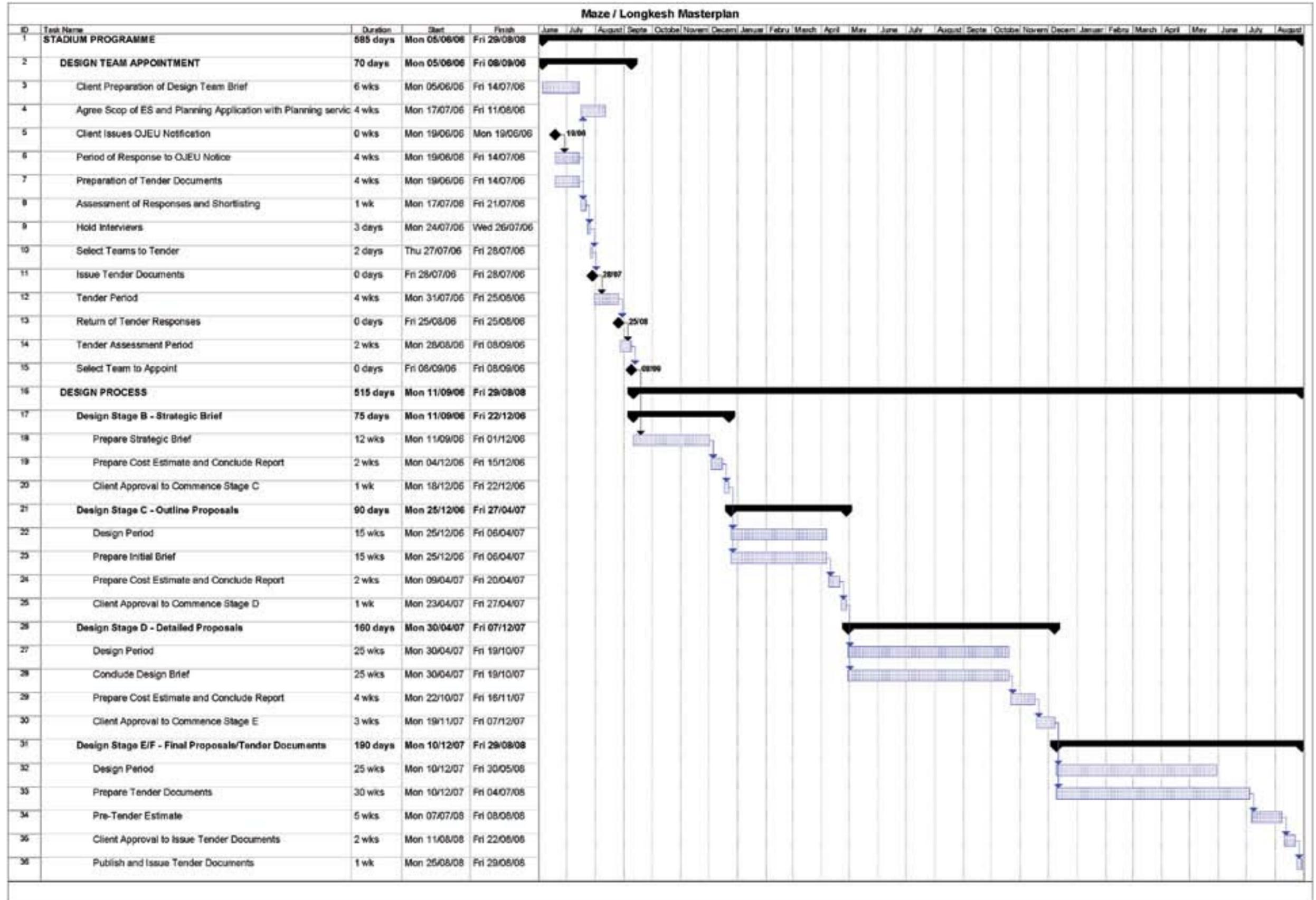


Figure 8.4: Maze / Longkesh: Stadium and Highways Programme (1)

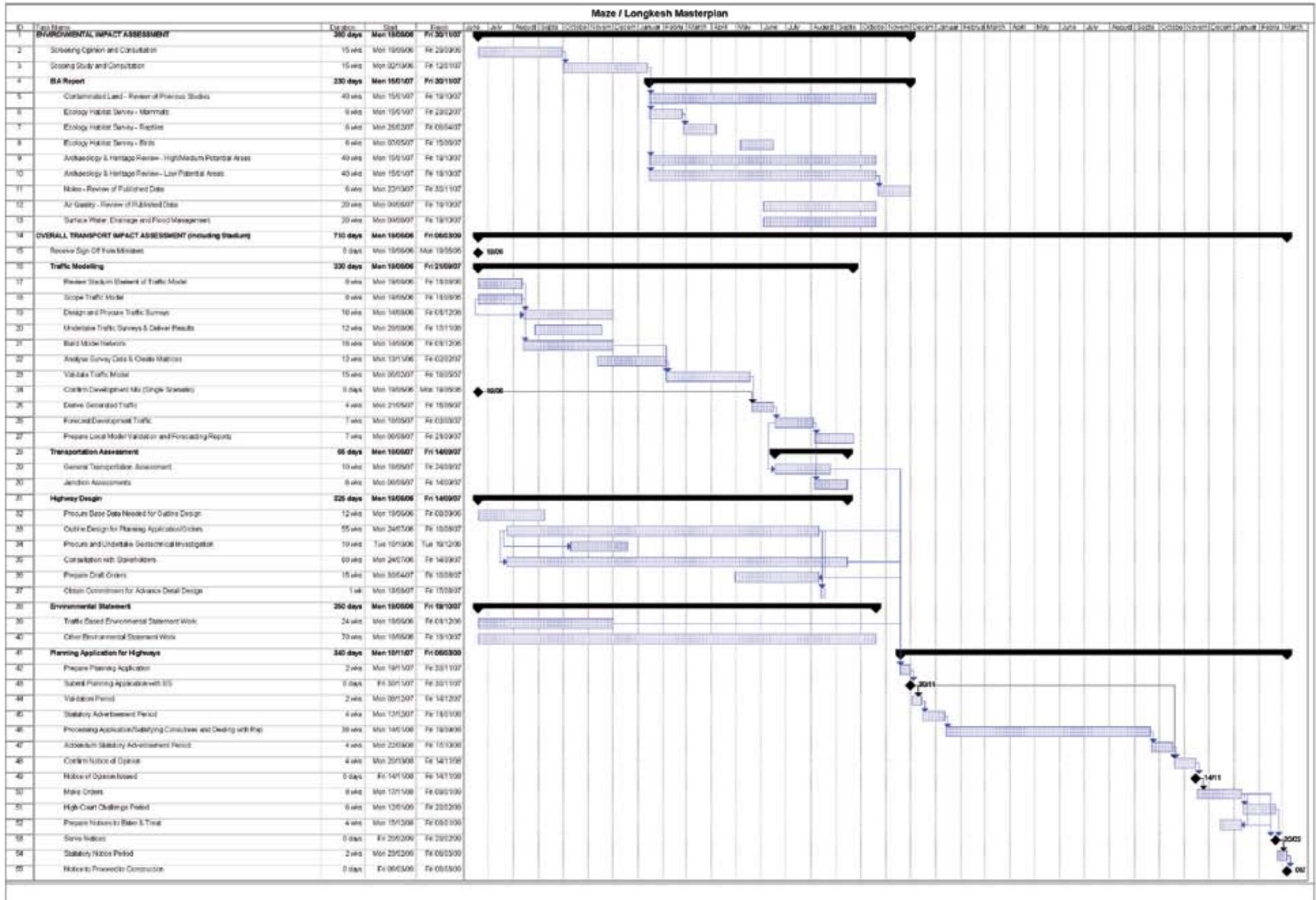


Figure 8.4: Maze / Longkesh: Stadium and Highways Programme (2)

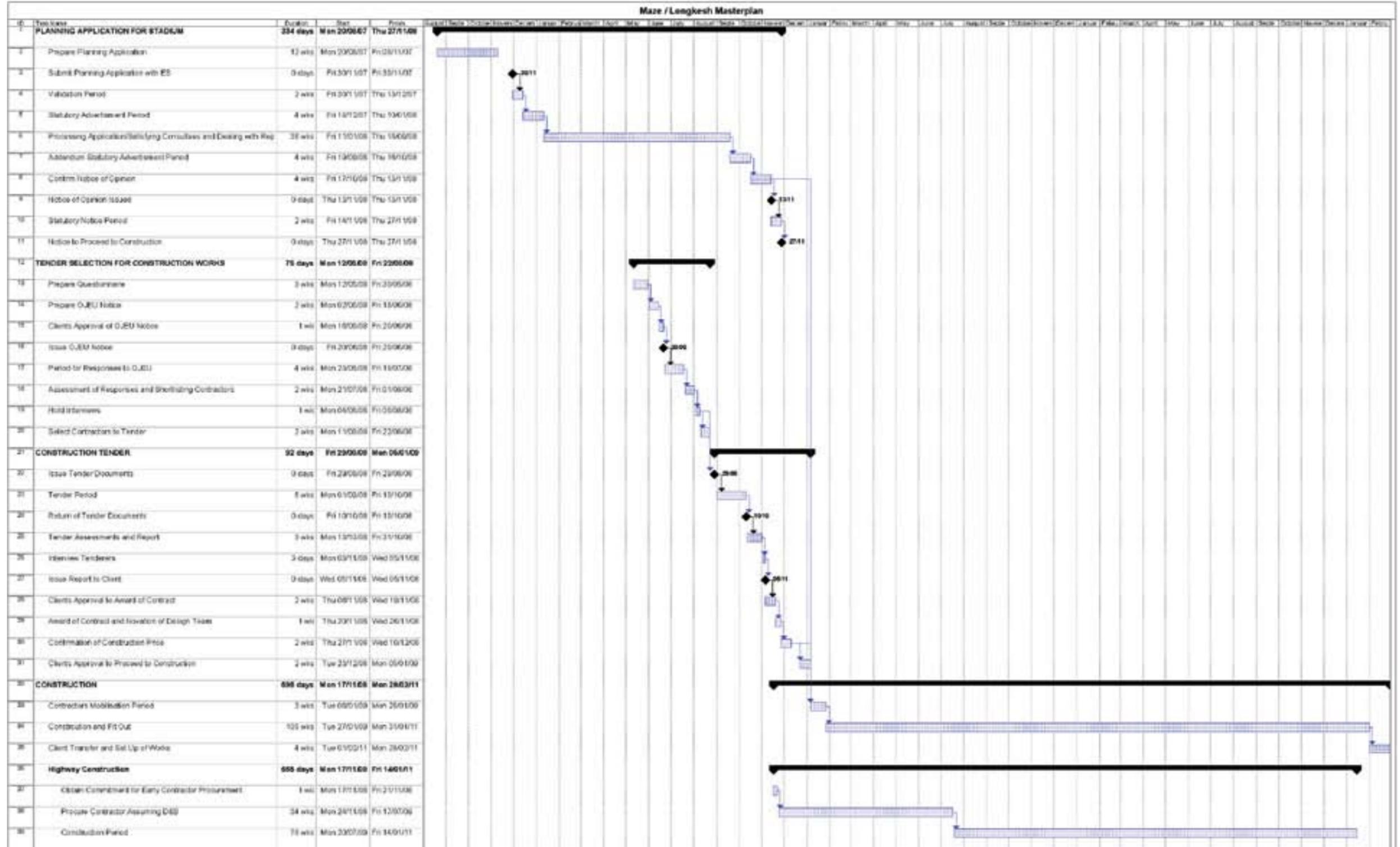
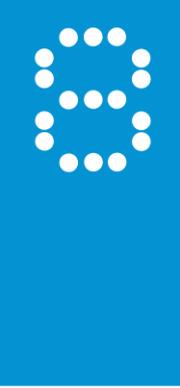


Figure 8.4: Maze / Longkesh: Stadium and Highways Programme (3)





# CONCLUSIONS

9.1 The Maze/Long Kesh is uniquely significant- it is the largest publicly owned regeneration site in the region and is of great historical significance. It is strategically located with good access to all parts of the region. The Government wishes to explore the potential of the redevelopment of the Maze/Long Kesh in promoting change and development. Regeneration of the Maze/Long Kesh site offers the potential to bring significant long term social and economic benefits to the whole community through a mix of development which reflects the strategic importance of the site and its role in the region.

**The overriding objective is to provide an internationally recognisable physical expression of the ongoing transformation from conflict to peace and to provide an inclusive, shared resource for the people of the region and beyond, reflecting the broad range of aspirations expressed during the work undertaken by the Maze Consultation Panel.**

9.2 The Masterplan demonstrates how the development of the Maze/Long Kesh could meet these objectives through the promotion of a mixed use development of regional significance which would create a unique destination.

9.3 Existing site conditions gives rise to significant requirements for new road and service infrastructure to accommodate the needs and potential impacts of the proposed development. This would have implications for development costs which have been assessed in the financial analysis. Given the estimated level of development costs and anticipated land values in the context of current planning policy, the proposed development would result in an "affordability gap". The objective must be

to reduce the affordability gap as the project moves forward by maximising private sector leverage and the development value of the entire site over the longer term and where possible reducing or phasing development costs.

9.4 It is recommended that the project moves to the next stage of detailed technical studies, market testing and design which would inform the development of the detailed business case and the preparation of planning applications. This would require the implementation of a comprehensive project management system, commitment to an agreed programme and milestones, the appointment of necessary technical advisors and consultants and close cooperation between key Government Departments and stakeholders.

9.5 It is considered that the project offers the potential for participation in the 2012 Olympics and Paralympic Games via the Football Tournament but this would be dependent on progressing scheme development and securing necessary approvals within a tightly defined timescale.

9.6 The potential benefits of development of the Maze/ Long Kesh site are significant and it is recommended that every effort should be made to explore the potential for developing a economically and environmentally viable and high quality scheme which would allow this challenge to be met.







