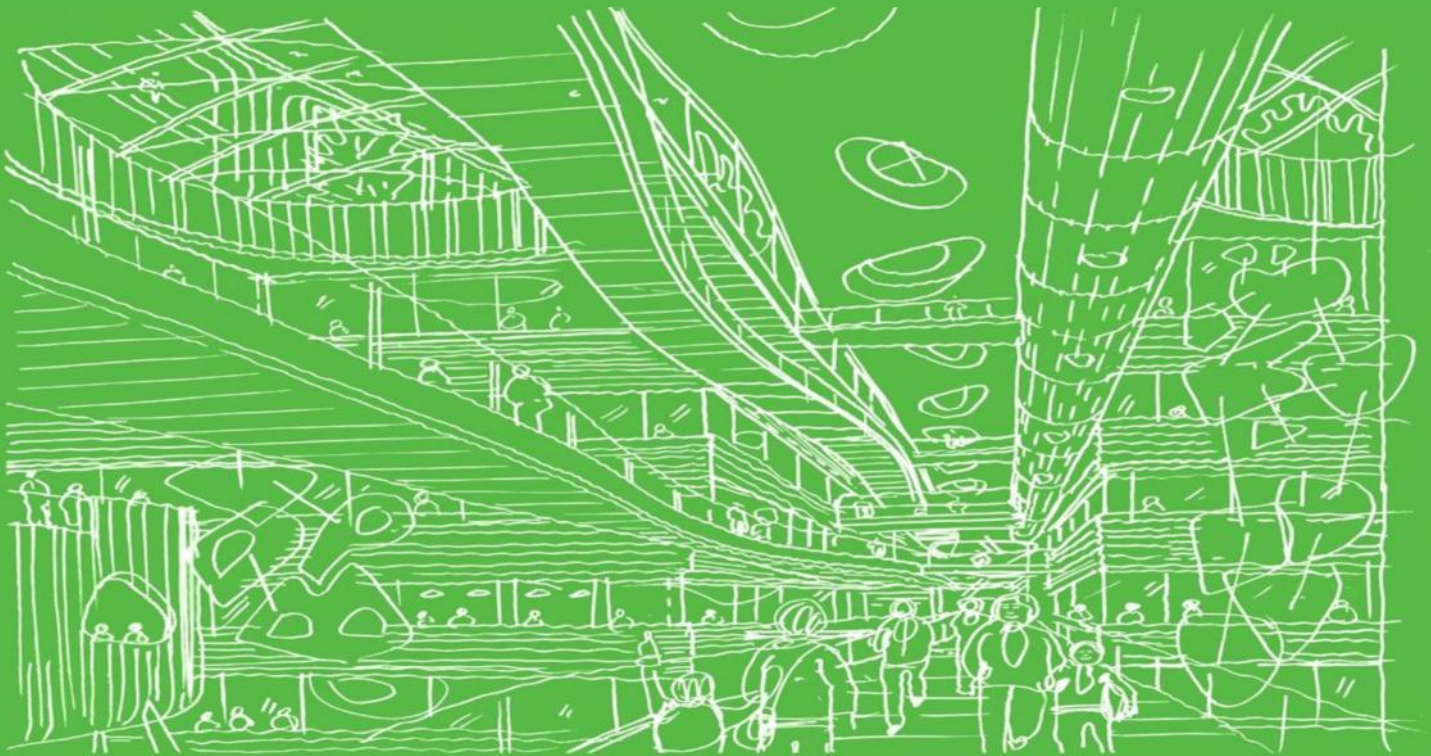


Children's Hospital Satellite Centre at Tallaght Hospital

Planning Application

Outline Construction Management Plan



August 2015

1.0 OVERVIEW AND OBJECTIVES

The purpose of this Outline Construction Management Plan as part of the proposed documentation for the proposed new children's hospital satellite centre located at Tallaght Hospital campus is set out below.

As the proposed development at the Tallaght Hospital site is of a much smaller scale than the St. James's Hospital Campus the Outline Construction Management Plan relates to site specific issues. The overall principles are consistent however, and the objectives of the Outline Construction Management Plan for Tallaght are as follows:

- To highlight key site information in relation to the proposed construction of a major new build project on the grounds of the existing hospital facility;
- Identify information required from the contractor in developing their construction management planning and requirements leading to the issue of the Contractors Construction Management Plan;
- Highlight key health & safety issues associated with over site set up, site access and traffic management considerations;
- Identify design assumptions with regard to overall constructability existing services, facilities, proposed site compound area, cranes etc.
- To identify key environmental mitigation measures that are required to be employed by the contractor.

For the avoidance of doubt, any construction on the Tallaght Campus must have regard to the mitigation measures set out in the individual sections of this EIS.

Children's Hospital Satellite Centre - Tallaght Hospital

The gross floor area of the proposed satellite centre at Tallaght Hospital is 4,466sq.m. and includes the construction of an extension of 3,142 sq.m. and refurbishment works of 1,324 sq.m. to the existing hospital on a 1.04ha site. The building will be three storeys in height (118.075m above Ordnance Datum) with a screened plant space or approximately 15.575m at its highest point above the street level at the new entrance (the Ordnance Datum at the adjacent existing pavement is 102.500m). The finished floor levels of each floor area as follows:

- FFL Level 0 - 102.650m
- FFL Level 1 - 106.460m
- FFL Level 2 - 110.255m
- FFL Roof Deck - 115.362m
- Parapet Level - 118.075m
- Flue Level - 119.525m

The development will be located close to the main site entrance and main adult hospital entrance and will connect back into the existing hospital alongside the hospital access road. The connection to the existing building is formed through abutting the existing fire escape stair to the east of the Administration Department and through the creation of a new hospital street running through the plan from the children's hospital satellite centre entrance area to the existing hospital street thus linking the new building to the rest of the hospital accommodation. The only connection to the hospital will be via this new street. The majority of the elevation of the building will be finished in yellow/buff brick to match the existing hospital; however, additional rendered and coloured panels

Children's Hospital Satellite Centre at Tallaght Hospital

Construction Methodology / Rev G

will also be introduced. This will in-keeping with the treatment for the overall family of buildings proposed under National Paediatric Hospital Project, and will also to provide a sense of identity for the children's hospital satellite centre within the Tallaght Hospital campus.

There will be also be an amount of additional existing department reconfiguration (142sq.m.) to allow for the new hospital street to the north of the Urgent Care Department, relocating offices as part of the adult hospital Administration Department.

The entrance on the northeast of the new building will be accessed from the existing main hospital set down and pick up area. A new entrance space will be created with associated seating, enhanced paving and planting. The levels have been designed to provide level access between the set down / pick up bays and the new entrance. The urgent care entrance is located on the south elevation of the building adjacent to the ambulance parking area. A direct pedestrian route will be provided between the set down / pick up bays to the south of the building and this entrance.

The development will provide 5 no. new cycle hoops and 10 no. existing relocated cycle hoops to the west of the main entrance to the proposal. All proposed changes to the parking bays are reallocations to retain existing numbers, including 25 no. relocated visitor car parking bays to the south-east of the proposal and 2 no. delivery parking bays adjacent to the existing building that is being refurbished. The reduction in the entrance mound will allow staff and deliveries earlier access to the service road, providing a level of segregation from visitor traffic. A new pedestrian access will be provided from the existing footpath along the hospital road to the east, with a new pedestrian crossing to allow safe access across the junction of the perimeter access road proposed.



The end of the existing perimeter access road and footpath to the south will be re-aligned to improve safety at the junction leading to the Urgent Care Department as well as improve staff access off Hospital Road. Drop off facilities maintain clear access for the Urgent Care Department as well as the provision of replacement bays. A new entrance canopy will be provided to give protection from the elements for patients accessing the main entrance from the existing drop off canopy.

As with all Departments in the Hospital Campus the way finding strategy is an important part of the overall service provision and needs to be incorporated in the full communication strategy including notification letters and external communications. The application drawings set out proposed signage locations including signage on the new building and a totem sculptural sign, located opposite the new pedestrian crossing on the corner adjacent to the realigned road junction.

Attenuation tanks will be provide below newly formed parking areas with minimal service diversions restricted to those located below the new building footprint. The proposed children hospital satellite centre and its construction compound will utilise the lawn area at the end of the hospital wing and the road, car park and adjoining areas to the south. The northern end of the existing planted mound will also be cut-back and re-graded to improved access to the southern side of the children's hospital satellite centre and existing hospital wing.

Construction Methodology / Rev G

The development will necessitate the removal of c.10 trees, together with the northern end of the planted mound. All of the trees to be removed are young early mature specimens - mainly birch and blue cedar. The 2 early mature oak trees will be retained as will the trees lining the entrance / reception to the existing hospital and the trees along the access road / car park. Once construction is complete a small area of new lawn will be reinstated with new tree planting at the end of the proposed satellite centre.

2.0 STATUTORY REQUIREMENTS - HEALTH & SAFETY

The contractor will be appointed as main contractor and Project Supervisor (Construction Stage) in line with the provisions of the Safety Health & Welfare at Work (Construction) Regulations 2013. As such they will maintain responsibility for the management of health & safety for all aspects of the construction works including site access requirements. The Health Service Executive and hospital maintain their own statutory obligations under safety legislation and will discharge these in line with requirements and best practice procedures.

This document should be reviewed in conjunction with the statutory requirements of the following safety legislation:

- Safety Health & Welfare at Work Act 2005 (Section 20);
- Safety Health & Welfare at Work (Construction) Regulations 2013 (Section 16);
- Safety Health & Welfare at Work (General Application) Regulations 2007;
- Supporting safety standards and codes of practice including but not limited to works to underground services, overhead power lines, cranes, confined spaces etc.

3.0 PROJECT SAFETY GOALS AND OBJECTIVES

The contractor will be expected to set out in detail site specific leading and lagging indicators to track positive elements such as training, safety consultation, feedback, safety inspections and auditing, compliance and conformance criteria -

- Health & safety objectives for the project e.g. formalised safety observations; safety behaviour code; safety inspection monitoring and assessment;
- Maintenance of infection control and aspergillus prevention measures and compliance;
- Defined communications and consultation arrangements;
- Recording of all accidents and incidents including near misses;
- Compliance with environmental management objectives including waste recycling, volume of water used, percentage of sustainable timber;
- Monitoring of noise, dust, vibration;
- Traffic Management on the site during construction detailing access/egress
- Method statements for service and utility diversions
- Method statement for striping of existing fabric within the existing Admin building being refurbished.

4.0 CO-ORDINATION AND COMMUNICATIONS ARRANGEMENTS

The design team for the project have prepared detailed design drawings an Environmental Impact Statement and specifications for the proposed children's hospital satellite centre, services, plant and equipment. A Preliminary Safety Plan has also been prepared by the Project Supervisor for the Design Process (PSDP) in conjunction with the design team. This Preliminary Safety Plan has outlined health & safety issues associated with the design and planning for the project works and has included information on the existing site, constraints and requirements for safety and health planning.

The appointed contractor will prepare a dedicated construction safety strategy supported by a construction safety plan, procedures and arrangements, traffic management plan, logistics plan, emergency plan.

During construction the contractor will be required to prepare works specific Risk Assessment and Method Statements (RAMS). Any works or access to areas under hospital control and management are subject to specific design team and hospital approval of this method statement requirement.

A Construction Stage Mobility Management Plan will be introduced. The implementation and promotion of the proposed measures during the construction phase will be responsibility of the contractor and take into account the Environmental Impact Statement submitted with the Strategic Infrastructure Development Planning Application. This section presents the key proposals.

Method statements in this regard will include (but not limited) to the following:

- Traffic management for all construction traffic, emergency, and maintaining main access and ambulance roads at all times
- Logistics planning, management and co-ordination
- Fire safety
- Aspergillus prevention together with infection control procedures and protocols; air monitoring to specified limits
- Works to existing services
- Works to existing structures
- Bulk excavation and ground works including planned routes to appropriate licensed landfill facilities
- Works along existing access routes
- Main building construction; off-loading, lifting and installation of large structural components including large span pre cast concrete panels
- Works in proximity to existing occupied areas such as the old age building and the existing ward accommodation above the refurbished Admin building. The existing crèche is being relocated.
- Other works as required



The above mentioned method statements will be consistent with the Environmental Impact Statement submitted with the Strategic Infrastructure Development Planning Application.

5.0 SITE ACCESS AND TRAFFIC MANAGEMENT

Access to the defined construction site and site compound will be achieved by way of the existing entrance and access routes to the hospital campus. The site compound area is located adjacent to the existing modular crèche that will be demolished as indicated on design layout drawings.

Access will also be required outside defined works areas including excavation works to the existing earth bank along the main access road to the hospital, works and connections to existing services etc. There are also pedestrian access routes along these roads.

A dedicated traffic management plan must be prepared by the appointed contractor, the objective of which is as follows:

- Ensure the safety of members of the public visitors construction operatives, staff and patients - there will also regular presence of young children in access areas;
- Maintain safe access and egress to/from all works areas;
- Ensure that traffic calming measures are implemented;
- Maintain and ensure adequate vision and sightlines;
- Ensure adherence to the Environmental Impact Statement submitted with the Strategic Infrastructure Development Planning Application.

Key inputs and requirements for the traffic management plan will include:

- Advance communications to all contractors accessing the site during construction;
- Erect traffic management signage in accordance with Chapter 8 of the traffic Signs manual to alert users of construction traffic;
- Maintain pedestrian crossing points; provide segregated access between vehicle and pedestrian & cyclists;
- Speed limit signage (15kph) to be erected at entry and on approach to the site and site working areas;
- Provide a wheel wash facility immediately inside the site entry point;
- Ensure that the roads and others areas are maintained and cleaned to a very high standard and that any spillages of an material are promptly cleaned;
- Provide adequate temporary lighting when and where required;
- A nominated temporary traffic operations supervisor will be appointed by the contractor.

With reference to the Traffic and Transportation chapter of the EIS:

Construction Access Routes

The site for the proposed children's hospital satellite centre at Tallaght Hospital campus is located in close proximity of a number of high-capacity roads, which are considered appropriate for and capable of accommodating all of the construction traffic, without any impact on residential streets or impacting on the Tallaght town centre street network.

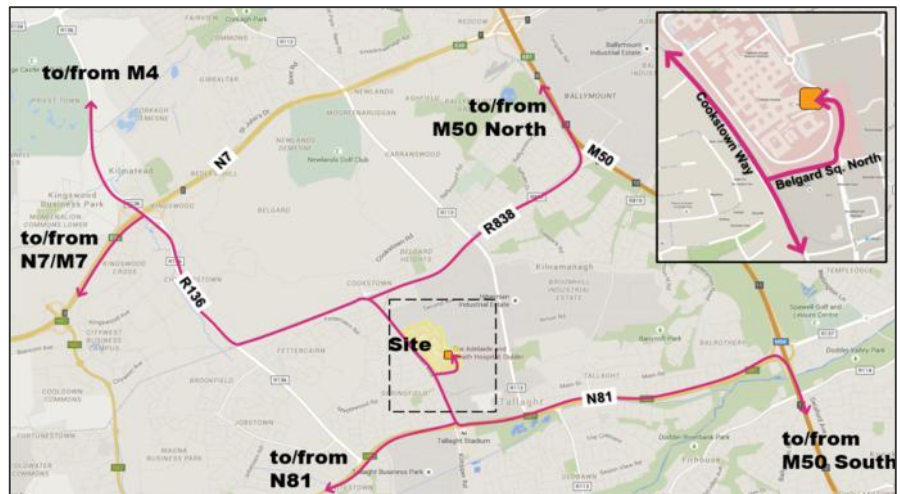
Construction Traffic Routes

All routes are accessed via the main Hospital access gate on Belgard Square North, and Cookstown Way, approximately 160m to the west. To the south, Cookstown Way leads to the N81, from where trips from the M50 (south) and from the N81 Blessington Road can be directed.

To the north, Cookstown Way joins the R838, which leads to the M50 at the Ballymount interchange for trips to and from the M50 (north). Trips to and from the west and southwest will access Cookstown Way via the R136, which connects to the M4 (Galway, Sligo) at Lucan and the N7/M7 (Cork, Limerick) at Citywest.

It is envisaged that the peak construction activity will be associated with the excavation stage, which is envisaged to last for a maximum of two weeks. During this peak construction period, it is estimated that a maximum 64 vehicular trips (32 trucks in and 32 out) per day will be generated by the construction activities.

The impact on the local junctions are outlined in the table below.



Peak Construction traffic Impact on Local Road Network

Junction name	AM peak			PM peak		
	Existing volumes	Additional trips	% increase	Existing volumes	Additional trips	% increase
Hospital Main Access/ Belgard Sq. North	1,710	15	0.88%	1,872	15	0.80%
Belgard Sq. North/ Cookstown Way	1,788	15	0.84%	1,722	15	0.87%

The junctions of Cookstown Way with the N81 to the south and with the R838 Katherine Tynan Road have higher capacity than the above-mentioned junctions and it is considered that the impact of construction traffic on these will be insignificant, even in a worst case scenario whereby all trips would be directed to one of these locations only.

6.0 CONSTRUCTION WORKS & BUILDABILITY CONSIDERATIONS IN DESIGN

The proposed works comprise the construction of a new children’s hospital satellite centre facility located immediately adjacent to and connected to the existing hospital facility. The design and nature of the works has been detailed on design drawings, specifications and supporting information e.g. Environmental Impact Statement but will include the following works which to be addressed in construction safety management procedures and supporting documentation by the contractor.

A possible location for the contractors compound has been indicated with additional areas identified for possible materials lay down locations. A temporary alternative entrance to the Elderly care ward will be required to maintain safe access and avoid crossover of construction activities and the general public. The possible location for the materials lay down area will require a phased approach to the highways works with early construction, potentially a temporary surface finish that allows continued access.

New build elements will be able to commence and start on site but refurbishment of the ground floor may require to be phased later during the construction period to allow for decanting of existing functions to alternative facilities on the campus.

Existing trees to be retained have been identified with suggested protection measures. Final agreements on service routes and strategies for safe construction should take account of the locations and any issues identified early.



There are spatial constraints on the proposed site in relation to construction traffic and impacts on access to the overall campus including the emergency traffic route in the campus grounds. These may be mitigated if the drainage works are progressed as an enabling works contract or the contractor is obliged to carry out certain works prior to main building works.

There are a number of local surface water drains and probably sewers on the site that will need to be diverted as part of the works. This diversion will involve deep excavations in the existing access road in order to tie back into the original outfall. Additional localised excavations below pad foundations will be required to achieve satisfactory bearing capacity. Suitable temporary stability measures for these deep excavations will be required. Localised pumping of ground water is not envisaged but if it is required is will carried out in agreement with South Dublin County Council. Silt and sediment tanks will be used prior to discharge to the foul drainage system on the campus. Refer to the Soils and Geology report in the EIS.

A crane will be required on site for an extended period of time to facilitate precast and in-situ concrete construction at each level. Consideration should be given to the proposed crane location on site.

It is anticipated that construction traffic movements will need to be carefully planned for the activities of excavation, spoil removal and backfilling.

It is anticipated that the total number of operatives on site will be approximately 100.

- Site set up include erection of secure and robust 2.4m high hoarding around site working areas. This will likely change during the works and will be addressed by site specific method statements and design reviews (for the foundations);
- Co-ordination and management of site access and traffic management to the site along

- existing hospital roads and access routes;
- co-ordination and scheduling of site related traffic with other users bearing in mind that existing routes are busy;
- Formation of site entrance;
- Formation of crane base; verification of existing ground conditions to support loadings;
- Bulk excavation;
- Construction of retaining walls;
- Verification of existing services and maintaining protection of these services;
- Construction of the main building structure and plant areas;
- Installation of heavy plant and components;
- Alteration works to existing hospital buildings and structures;

7.0 IMPACT OF WORKS ON THIRD PARTIES

The chosen contractor must show competent ability and understanding of working within a live hospital campus. Immediately adjacent are the Elderly Care Ward, Administrative Offices, IT Server Rooms and the Main Hospital Access Road that all have to remain operational through the construction of the new facility. In particular the Contractor will minimise the associated risk of aspergillus through designated procedures, controls and preventive measures with active monitoring in associated with hospital infection control; incorporating infection control protocols including aspergillus protection measures and protocols, assessment air sampling monitoring to specified limits during the works, liaison with existing hospital infection control department, implementing safety control and management requirements arising from excavation works, break out of existing structures, noise and vibration, dust levels together with ongoing liaison with hospital authorities.

Staff and deliveries will still access the Hospital via the Main Campus entrance on Cookstown Way, to the south of the site and need to access the service perimeter road, the layout of which is being re-configured as part of this project at the entrance to the satellite centre.

Traffic flows, already tight on the site should be affected a little as possible with operational agreements on acceptable delivery times. Alternative access for construction traffic should be considered from Fourth Avenue to the north east of the proposed site with vehicles leaving via the main campus entrance to reduce impact on traffic pressures.

Pedestrian access will remain as the Main Campus Entrance off Cookstown Way with a steady flow along the footpaths either side of Hospital Road, including potential drop off provision from cars etc. A temporary new crossing point should be considered at the boundary of the construction area (see Contractor's Setup Plan) to provide safe access to the other footpath when adjacent to the site works.

Builder's dust and noise should be carefully considered with works progressing immediately adjacent to openable windows of existing departments.

8.0 KEY SITE INTERFACES

The following site interfaces i.e. overlap and proximity between construction works and the existing hospital and public access and occupied areas have been identified:

- Site access and traffic management;
- Ongoing measures (throughout construction) to prevent risk of aspergillus and air monitoring by infection control department within the hospital to ensure compliance with stated requirements;
- Operation of craneage;
- Excavation works along existing access routes;
- Adjacency of compound to existing modular buildings to be relocated;
- Adjacency to the existing Breast Check facility;
- Site security and protection;
- Works to existing services ; connections to existing services including water main, surface water and foul drainage, existing manholes;
- Site compound.

9.0 ORGANISATION AND ARRANGEMENTS

Set out site safety organization and responsibility to achieve stated objectives including but not limited to the following as noted below - this to be developed further by the appointed contractor:

- Traffic management and logistics co-ordinator;
- Craneage co-ordinator;
- Infection control co-ordinator;
- MEP manager;
- Temporary works co-ordinator;
- Fire safety and emergency co-ordinator.
- Project Liaison with key stakeholders such as Tallaght Hospital

10.0 CONTRACTOR PREQUALIFICATION

The contractor must set out the procedures by which contractors are assessed, selected and appointed from the bid and pre-construction phase of the project works. The procedures should also set out how contractors will be pre-conditioned in regard to the management of health and safety when on site.

The following requirements should be noted and included:

- Supervisor competence;
- Training and experience;
- Logistics and planning;
- Lifting procedures and equipment;
- Safety induction procedures;
- RAMs;
- Safety system of works;
- Control of respective works areas.

11.0 HAZARDOUS MATERIALS

Potentially hazardous materials and substances for use on site should be identified with supporting materials safety data sheets (MSDS) information should be detailed in line with the provisions of the Chemical Agents Regulations, control of substances hazardous to health and codes of practice:

- Identification of health hazards (including operatives but also any others which might be affected including patients staff and members of the public) through their storage, use and / or application
- State the measures used to prevent harm
- Making sure that these measures are implemented
- Providing information instruction and training
- Providing health surveillance in appropriate cases
- Planning for emergencies
- Waste management considerations

12.0 MAIN HEALTH & SAFETY ISSUES

The following site specific safety issues have been identified and highlighted in the Preliminary Safety Plan for the project:

- Proximity of construction works to an existing and live hospital including link construction; Ensure the safety of members of the public visitors construction operatives, staff and patients - there will also regular presence of young children in access areas The new building is proposed immediately adjacent to the Main Acute Hospital Entrance, therefore clearly defined site hoardings will be specifically required along the this western boundary.
- Maintain safe access and egress to/from all works areas. The suggested site compound has been placed to the east on the site as far from public circulation as possible.
- Ensure that traffic calming measures are implemented, with suggested segregated site traffic entering from the north west gate.
- Maintain and ensure adequate vision and sightlines. The proposed site isn't constrained although site access from the east will be close to the existing 3 storey elderly care ward buildings which may require consideration for construction traffic visibility splays.
- Maintain existing ambulance and services, pedestrian and vehicle access, services deliveries within the hospital.
- Ensure effective co-ordination in both design and construction stages for the relocation of existing modular buildings as part of the overall project. Key areas to be assessed and managed will include; phasing, access, proximity of works to other construction works, services etc.
- Co-ordination of construction e.g. different levels between the construction of the new hospital and the existing structure, to be outlined on structural drawings.
- The immediate adjacency of the existing occupied hospital and maintaining access ; tie ins to the existing building structure and services; maintaining critical services; planning and management of works at height both internally and externally.
- Maintaining existing fire safety procedures including co-ordination of emergency access and evacuation arrangements.
- Works to existing services including medical gases, water, power, and electricity; anticipated diversions works for services (there are existing electrical lines within the footprint of the

- proposed new hospital); minimising risk of disruption.
- Deep excavation and ground works for new foundations, services diversions, trenches for services and possible removal of existing earth bank mound.
- Minimising associated risk of aspergillus through designated procedures, controls and preventive measures with active monitoring in associated with hospital infection control
- Identifying and incorporating into the design and supporting communications, incorporating infection control protocols including aspergillus protection measures and protocols, assessment air sampling monitoring to specified limits during the works, liaison with existing hospital infection control department, implementing safety control and management requirements arising from excavation works, break out of existing structures, noise and vibration, dust levels together with ongoing liaison with hospital authorities.
- Maintenance of day to day hospital services access to existing plant equipment and services
- Heavy lifting or large prefabricated components close to public access and occupied hospital within defined areas.
- Development of phasing and sequencing of works planning.
- Location and confirmation of existing external services.

13.0 EMERGENCY RESPONSE PLAN

The project works involves a major construction project immediately adjacent to an existing and live public hospital facility. A dedicated site emergency plan should be prepared and reviewed in detail with existing hospital authorities in order to ensure effective implementation of procedures - by all parties - in the event of an emergency during construction.

This should address the following criteria:

- Identify potential health & safety emergency situations;
- Potential environmental emergency;
- Outline of necessary resources;
- Emergency plan outlining actions and contact details;
- Emergency evacuation to assembly point;
- Missing person;
- Emergency scene;
- Emergency contact numbers including site staff, contractors e.g. crane hire companies, pollution clean up, local authority, hospital and utility companies.

14.0 HEALTH & SAFETY MANAGEMENT

Provide a detailed safety management plan for the project to address:

- Site access and set up including pedestrian access and movement, segregation from vehicle access;
- Development of site logistics plan to address: access control; security; traffic management; deliveries; storage; housekeeping; waste management etc.
- Hazard Identification, risk assessment and Control measures;
- Infection control procedures and management requirements;
- Change management affecting safety, health and environmental impact;
- Reporting of accidents and incidents;
- Occupational first aid and case management;
- Adjacent hospital access and requirements.

15.0 ENVIRONMENTAL MANAGEMENT PLAN

Provide a detailed environmental management plan for the project to address:

- Ecology control plan;
- Noise control plan including anticipated noise levels, duration, works scheduling, restrictions, positioning of equipment; use of noise screens;
- Dust controls (air, emissions and dirt); impact of site related vehicle movement, wheel wash facility - selection, location and management; maintenance inspection and regimes for site operation; covers to site vehicles; cleaning and maintenance of existing roads;
- Discharge Effluent Plan; control of discharges, location of welfare facilities, impact on existing drainage; water treatment;
- Prevention of discharge of any site materials e.g. waste materials, oils, paints, other contaminants or wash out of any materials in to any drain, sewer or water;
- Ground control measures - review and incorporation in to site planning site investigation reports and surveys procured for the project works; identification of any contamination during excavation; preventing any cross contamination during the works;
- Vibration control plan to reduce the impact of vibration e.g. heavy works, demolition, plant use to be restricted; preference to electrically powered equipment and plant;
- Spill incident prevention and control plan including drips, stains, spillage or release of any liquid; maintenance of plant and equipment, selection and maintenance protection of storage plant; designated local up facilities; certified self bunded metal units for fuel storage;
- Emergency response plan;
- The requirements of the Construction & Demolition Waste Management Plan (included in Appendix 10.3 of this application).

16.0 PROGRAMME AND TIMESCALE

It is envisaged that construction of the Satellite hospital will commence in the Q2 2016 and be completed in approximately 18 months. The construction works will be phased as follows:

- Site set up, construction of site compound and services;
- Implementation of aspergillus prevention measures;
- Site clearance and excavation works;
- New build works; are likely to commence in advance of refurbishment works;
- Vacation of occupied areas;
- Commencement of hospital construction;
- Commissioning of plant, equipment and services;
- Handover of completed building.

The design team review of the construction programme will take account of all identified health & safety issues, highlighting potential areas of mitigation and safer construction methods for consideration by the full team.

17.0 ENVIRONMENTAL IMPACT STATEMENT

Reference should be made to the attached EIS report and relevant chapters in regard to the following:

- Noise control (Chapter 11)
- Dust minimisation (Chapter 12)
- Discharge of effluent (Chapter 8 & 17)
- Groundwater control measures (Chapter 8)
- Vibration control (Chapter 11)
- Spill incident control (Chapter 8)
- Waste management (Chapter 10)
- Waste reduction and construction demolition management plan (Chapter 10)

18.0 WORKING HOURS

The hours of work proposed for the project are as follows, unless otherwise advised:

Monday to Friday	7.00am to 7.00pm
Saturday	8.00am to 2.00pm
Sundays and Bank holidays	Any construction activity, with the exception of emergency, works will be limited to 8.00am to 2.00pm and will require the explicit permission of the local authority.

19.0 REFERENCES

This document should be read in conjunction with:

Roughan & O'Donovan: Designer's Assessment of Safety and Health Hazards/Risks. (*doc. ref: 14.232.100 DAR Stage 2(a)*) and all other consultants construction managements plans.

HLM document 13130.06 / TH-HLM-A-DR-XX-Z1-1010 Contractor's Setup Plan.