

WASHINGTON ADVENTIST HOSPITAL - OPTION B

Phased Replacement at Takoma Park - Master Plan Phases 1, 2 & Garage

IMPACT OF RENOVATION/EXPANSION PROGRAM ON EXISTING HOSPITAL OPERATIONS

| Item | Primary Sources | Zone of Impact | Disruption / Risk | Mitigation Measures |
|--|--|---|---|--|
| Noise | * Construction Equipment & Vehicles | Hundreds of feet and multiple floors. Varies by source. | Variable - from mild distraction to serious interference with communications. | Restricted work hours and work areas. |
| Vibration | * Heavy Demolition * Excavation / Blasting * Pile Driving | Entire project site. | Interference with sensitive medical equipment including imaging, surgical lighting, etc. | Restricted work hours. Emergency shut-down procedures. |
| Air-borne Contaminants (Dust) | * Heavy Demolition * Excavation / Blasting * Material Delivery | Entire project site. | Contamination of interior air including fresh air intakes. Compromise of infection control measures. | Construction site procedures. Equipment washdown. Site and existing equipment monitoring. Additional / enhanced filtration. |
| Surface-borne Contaminants (Mud & Dirt) | * Grading * Landscaping * Paving | Areas on pedestrian and vehicular path of travel. Primarily building entrances. | Contamination of interior surfaces. Compromise of infection control measures. | Temporary vestibules. Equipment washdown. Walk-off mats. Controlled procedures for travel between site and existing facilities. |
| Physical Security - Accidental Injury | * Tie-in between existing and new security systems * Accidental breaches | Entire project site - staff, patients and visitors. | Higher risk of physical injury due to presence of construction personnel and equipment operating in or near occupied areas. | Construction safety measures (tool box talks, barriers). Staff training. Construction phase signage / wayfinding. Additional security staff and construction procedures. |
| Physical Security - Theft or Assault | * Tie-in between existing and new security systems * Intentional breaches | Entire project site - staff, patients and visitors. | Higher risk of theft or assault due to possible presence of un-screened personnel in or near occupied areas. | Screening and badging of workers. Staff training. Additional security staff and construction procedures. |

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|---|---|---|--|---|
| Data Security | <ul style="list-style-type: none"> * Tie-in between existing and new IT/data systems * Accidental breaches * Intentional breaches | IT/data networks and electronic medical records systems. | Higher risk of compromised data due to possible presence of un-screened personnel and equipment. | Screening and badging of workers. Additional security staff and construction-specific network protocols. |
| Electrical Service Outages | <ul style="list-style-type: none"> * Tie-in to new service * Tie-in to new gensets * New ATS systems Hidden conditions | Entire project site. * | Risk of electrical service outages during tie-in between existing and new services. | Temporary or permanent redundant feeders and back-up generators. Distributed battery back-up units. Dry runs for critical cut-overs. |
| Heating & Cooling Outages | <ul style="list-style-type: none"> * Tie-in to new boilers * Tie-in to new chillers * Tie to new controls | Entire project site. | Risk of heating and cooling outages during tie-in between existing and new services. | Back-up boilers. Temporary portable chillers. Manual override procedures. |
| Support Staff Efficiency & Response Time | <ul style="list-style-type: none"> * Relocation of support service areas * Changes in path of travel from support services to units * Relocation of units | Potential for all support services to be affected: dietary, EVS, imaging, pharmacy, lab, OT, etc. | Increased risk of errors and inefficiency due to temporary relocation of support services and/or serviced units and changes in path of travel due to construction phasing plans. | Temporary imaging equipment. Additional wayfinding, orientation, documentation and staffing. Dry runs for critical support functions, e.g. patient transfers between or into critical care units. |
| Reduced Patient Census | <ul style="list-style-type: none"> * Difficulty or perceived difficulty to access facility due to circulation and parking changes * Patient's desire to avoid inconvenience of dealing with a facility under construction | Entire facility. | Patient census typically drops during major construction projects at existing hospitals for the reasons noted under "Primary Sources." | Alternate parking methods, e.g. valet service or off-site parking with shuttles. Additional construction phase wayfinding, education, outreach and public relations efforts. |

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| <p>Lowered Patient Satisfaction Ratings</p> | <ul style="list-style-type: none"> * Difficulty or perceived difficulty to access facility due to circulation and parking changes * Inconvenience of dealing with a facility under construction * Confusion over location of functions which have moved due to construction phasing | <p>Entire facility.</p> | <p>Patient satisfaction ratings typically drop during major construction projects at existing hospitals for the reasons noted under "Primary Sources."</p> | <p>Alternate parking methods, e.g. valet service or off-site parking with shuttles. Additional construction phase wayfinding, education, outreach and public relations efforts.</p> |