

APPENDIX B – 2015 KILDONAN PARK CENTRALIZATION OF PARK MAINTENANCE SERVICE YARDS REPORT



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KILDONAN PARK CENTRALIZATION OF PARK MAINTENANCE SERVICE YARDS

Scatliff + Miller + Murray (SMM) is pleased to submit this report, completing our assessment to help guide the creation of a centralized park maintenance services yards zone in Kildonan Park. We identify current inventory of park services buildings and maintenance equipment and offer a recommendation for placement, within Kildonan Park, leading to a better park experience for visitors, and an efficient work yard for the multiple layers of programs necessary to operate the park effectively. As background information, we used the “Kildonan Park Master Planning Document (Guiding Development & Design Today & Into the Future)” as submitted by SMM to the City of Winnipeg in 2011. This document extensively looks into the history, current conditions, and visioning needs for Kildonan Park. It is the intention of this report to work within the guidelines of this planning document to develop a strategy for the centralization of park services.

We target specific seasonal maintenance equipment and uses, look at pre existing (staff and visitor) park functions, and interpret parks maintenance programs. The report provides a mix of amenities for the staff and operations equipment in the park, while proposing to shelter the work yard from the park visitor. It is a goal of this document to provide unique experiences that are flexible to change with times of days and seasons, facilities that are accessible and inclusive, and programs that support the needs of each of the user groups within a four season operation schedule.

PROJECT UNDERSTANDING AND PROGRAMMING PARAMETERS

It is understood that there is a need to upgrade, and consolidate services between two distinct work yards within the park, those being the Foreman’s office and garages (west of the formal gardens), and the Works Yard (including park patrol offices) to the north west of the pool.

As outlined in the 2011 Kildonan Park Master Planning document, and through discussion Jason Bell, Superintendent of Centralized Park Services at the City of Winnipeg, and Jeff Szydluk, Summer Foreman, Kildonan Park, there is a need for a centralized maintenance service yard that can facilitate both the active maintenance of park services, as well as a secure yard for equipment, tools, and park staff offices and meeting rooms. This centralized area is to be programmed for seasonal use of equipment and movement of materials, as well as off season

storage of equipment necessary to park functions and operations. Beyond equipment and tool storage, there is a requirement for ample vehicular, working yard, and personal safe working distances, as there will be multiple potential instances of overlapping programs. In total, there appears to be +/-6000 sq. ft of programmed space in the existing Foreman's office and garages area, and +/- 3000 sq. ft of existing space in the Works Yard. The goal of this study is to assess the possibility that by centralizing all of the park's maintenance service yards (equipment, materials, and personnel), there could be opportunities in reducing building and yard size as many programs seem to have the capacity for sharing or overlapping accommodation and space.

Programming Parameters:

1. Impact on past, present and future planning initiatives within Kildonan Park.
2. Opportunities of efficiencies from consolidating overlapping programs spread through two sites, and 8 buildings (including an inventory of equipment, and seasonal personnel staffing levels).
3. Long term planning vision for Kildonan Park and opportunities that may arise in the proposed location for the new works yard. Park grounds could potentially be made available for public change of use programming because of the consolidation of programmed areas for park services.
4. Storage and maintenance of equipment and the particular programmatic working needs for personnel while on the job. Tours of three off site City of Winnipeg maintenance facilities were completed in order to understand, from an operations perspective, how equipment is stored, maintained, and used, as well as understanding how the facilities are staffed, operated efficiently, and safely. The tours, as well as direction provided by Jason Bell, James Houldsworth, Superintendent of Parks North, Andy Johnson, Foreman 3, Parks North, and Brian Barron, Foreman, Kildonan Park were invaluable in shaping this document.
5. The affect of seasons on workflow, size of workforce, and use and storage of equipment.

PARKS SERVICE EQUIPMENT AND PROGRAMMING SUMMARY

Through initial site consultations in the fall of 2014 with Jason Bell and Jeff Szydlik, a general preliminary priority list was established, based on current park holdings of equipment and tool storage needs. The new facility (grounds and building) is to include the following:

Equipment Storage Program: General Needs

- Outdoor equipment storage
- Indoor heated garage space for vehicle and equipment storage
- Outdoor/ outdoor covered yard space for vehicles (the storage of materials is elsewhere on site, in the 'Nuisance grounds')
- Large scale and small scale storage and daily layout space for maintenance tool and equipment
- Tool lock up, 2 tool cribs, hand tools and garden tools
- Storage for irrigation equipment (for north district of the city)
- Storage for equipment parts and maintenance tools
- Fuel storage in a small separate building
- A two inch water service into the building is needed to rapidly fill water trucks

Parks Staff Program: General Needs

- Consideration in the variability of summer/ winter staff numbers (+/-35 summer staff, compared to +/-10 winter staff)
- Reception, kitchen, lounge, locker room / washrooms with showers
- 3 locked offices (Senior Foreman, Summer Foreman, Head Gardener)
- Lunch room/ layout room/ meeting room (away from garage/ equipment storage)
- Computer station
- Park volunteer group area include vestibule, break room, locker room, lockable office, (with a possibility of shared program spaces)
- Parking for staff vehicles

An inventory of known equipment was also completed by Jeff Szydluk in the fall of 2014, all of which will need to be accommodated in the new facility. The equipment is divided into two program areas, summer and winter, reflecting the very different needs the grounds crews need to operate under seasonally.

Inventory of Summer Tools and Equipment

- 6 Crew Cab trucks
- 3 Supervisor's trucks
- 6 Kubotas Outfronts, parked inside
- 1 Toro wide cut parked inside
- 1 Toro reel mower parked inside
- 3 Gators parked inside
- 1 Dump truck
- 1 Loader
- 1 Garbage side compactor truck
- 1 Skid steer
- 1 Handi-dump trailer

Inventory of Winter Tools and Equipment

- 1 Plow truck, parked inside
- 1 Water truck (crew cab), parked inside
- 1 Kubota broom, parked inside
- 1 Trackless and spreader, parked inside
- 1 Loader(should be parked inside)
- 1 Dump truck
- 2 Crew cabs
- 1 Foreman's truck
- 1 Garbage side compactor
- 1 Fuel truck (inside cold storage)
- Implement attachments: broom, blower, blades
- Vehicles outside need plug in services

A more detailed program of uses was established with Jason Bell, James Houldsworth, Andy Johnson, and Brian Barron in which the final working parameters of the program (buildings and yard) were established in January 2015. Two separate buildings are to be considered, one for equipment, one for staff. The lists of requirements became specific to equipment sizing, and staff operations of the facility.

Equipment Storage Building Specific Needs

- Need for one 12' x 12' garage door for water truck/ front end loader. Included within this bay, a 2" water supply line to rapidly fill water truck
- Need for a wash bay with PVC walls (same bay as the 12' x 12' garage door). This bay to include pressure washer, and large capacity air compressor
- Garage storage for 6 vehicles (garage door size 10'w x 8'h), as well as storage for Gators, and lawn mowing equipment. This is a storage garage, not a maintenance garage. Minimal storage is needed for vehicle maintenance – nothing more beyond a combination of bench space, and wall hanging space along the perimeter of the facility. A drive through bay would be nice if possible
- Lockable tool storage area for weed eaters, clippers, rakes, shovels and other similar yards maintenance tools
- Lockable separate 'sundries' area for items like gloves, oils, chains, safety equipment, tape and spray paint, jacks and other similar items
- The type of work that will affect indoor air quality is not to occur in this space. The facility is for storage only (grinding and sharpening of tools occurs in other City of Winnipeg facilities with proper air handling equipment for health and safety requirements)
- Wall construction should include ¾" plywood to the interior of the building wall assembly to allow for the hanging of shelves, or equipment around the perimeter of the building as need arises
- A small area for a desk to allow for equipment manual storage and reference material. This would not function as an office – it would be for the storage and use of equipment manuals
- A separate small enclosure is needed for fuel storage within the yard

Park Staff Building Specific Needs

- The entire building is to be made to City of Winnipeg accessibility standards
- A separation between the staff room and staff offices is required
- Within the office area, three lockable offices for parks staff, as well as a lockable office for Park volunteer groups, are required. The offices are to accommodate a desk or workstation and room for an extra chair for desk based meetings. A reception area is necessary, within an open area to include a meeting area, and a computer station. Park staff will come into this area for their daily assignments with senior park staff
- Accessible from the office area, a lockable storage room is necessary to store smaller items of value assigned by senior staff
- Included on the staff side is a larger space to accommodate upwards of 35 individuals to eat, gather, and store their personal goods. A simple kitchen (refrigerator, full size, sink, and microwave), and storage for silverware, and dishes is to be provided. Open shelves are desirable instead of closed upper cupboards
- Lockers are not important for each staff member as assigned trucks are mostly used to store personal objects
- An area to fill log books is required within this space, as this is a daily occurrence. There should be room to store logbooks, and vehicle keys
- Universal toilet rooms are not required within the washrooms, but privacy is important as some staff members may change into work clothes. Benches for changing are desirable, and some clothing lockers may be useful within the washrooms
- Shower facilities are not needed
- Outdoor space for summer eating is desirable; this area could also serve for covered bedding plant storage in the spring months

Works Yard Specific Needs

- The yard is not for the storage or hoarding of materials; it is only for official vehicle and equipment storage
- The yard is not for staff personal vehicle parking

- There should be separate in and out 'loop around' access to the yard, to minimize the need to back up large equipment, or trailers within the yard
- The yard should be secure at all times through a perimeter fence, and vehicle gates to minimize park visitor foot traffic from wandering through the facility (as this currently happens on both maintenance sites)
- The surface of the yard is to be asphalt
- The existing Nuisance yard (to the east of the golf course fence, adjacent to the creek) can be used for irrigation pipe storage

All of the above program information was used in the planning of the Kildonan Park centralization of park maintenance service yard facility. The proposed location of the facility considers the movement of staff as well as the storage and pickup of tools and equipment as needed during both daily and seasonal rotations. Efforts have been made to right size the facility to correspond to shifting numbers of seasonal staff, as well as equipment and tool migration between various city works yards through different seasons of use and maintenance cycles. In right sizing the facility, as opposed to filling disparate service buildings and yards across Kildonan Park, it appears that the built program can be 25% smaller than the existing condition, and a consolidation of property allows for a quarter acre of property to be given back to public use within the park.

SITE IDENTIFICATION AND FINAL SITE LOCATION

Numerous locations for the park maintenance service yard facility were identified throughout Kildonan Park. Needs were assessed based on access, feasibility, safety (both for workers, and the general public), aesthetics within the park, and future programming opportunity and vision. Included in this report is the location chosen for the facility, as well as other potential sites reviewed within the park. In total, there were four potential sites chosen:

Site 1: Existing works yard near Main St. entrance to Kildonan Park (west of the formal gardens)

Site 2: Existing site of the Nuisance Yard (east of the golf course, adjacent to the creek)

Site 3: Existing site of the Park Ambassador office, pump storage, irrigation lines, and park storage (south east of the Peguis Pavillion)

Site 4: Adjacent to the parking lot used for staff for Rainbow Stage (east of the swimming pool)

Site Selection Analysis

Each site was visited with Andy Johnson and James Houldsworth, and reviewed for its strengths and weaknesses. Site 1 was unanimously chosen for attributes that affected past (sense of history), present, and future planning, and operations opportunities of the park. Refer to the attached key plan for site locations

Site 1: Existing works yard near Main St. entrance to Kildonan Park.

This is the chosen site for the the Kildonan Park centralization of park maintenance service yard facility project as identified within this report.

Positive Attributes:

- Existing road access points and yard asphalt are in good condition; all needed services are on site
- Separation between general public and staff is a positive for workflow, noise, and safety
- Access into and out of yard is convenient from a two way traffic perspective. As vehicles come into an leave this facility form other city divisions, access is ideal
- Large scale tree removal would not have to occur due to the current use as a maintenance yard

- The design of the facility can be used to strengthen visitor progression into the park, and perhaps play on the modern architecture of existing park structures
- The placement of the yard to the periphery of the park allows for new public programming opportunities on the existing central works yard site
- The building could provide a hard edge to the established formal gardens, as well as the possibility for public restrooms (if desired)
- Allows for a welcome center for information as visitors drive into the park; an ideal location for the Park volunteer groups, and accessible parking spots for events that may occur within the formal gardens

Negative Attributes:

- Care will need to be taken to the architectural style of the building and yard perimeter as this is the first introduction to the park from the Main St. entrance
- Care will be needed as the vehicular access to the yard crosses pedestrian paths, as well as two way traffic

For reference the three other sites identified within Kildonan Park are outlined below:

Site 2: Existing site of the Nuisance Yard

Positive Attributes:

- Location is central to major park functions
- Large scale tree removal would not have to occur due to current use as a storage yard for small equipment, seasonal implements and soft scaping goods and materials
- Difference in elevation would help to minimize scale of buildings as seen by park visitors (this area is lower than the road to the east)
- This is a known works yard location within the park – the build up for a maintenance yard here would not affect a sense of history of use to park users
- A mature tree buffer around the perimeter of the site provides excellent screening
- Site is large enough to include the centralization of park maintenance service yard facility project and the existing Nuisance yard

Negative Attributes:

- Access is via a one way loop road, currently staff would have to either follow perimeter road all the way around the park, or illegally cut against traffic for access into the yard (through the existing curb cut (new access points will be difficult to the south due to grade differences))
- Proximity to Peguis Pavilion may have negative noise pollution consequences
- As this area is very sheltered, security of equipment against theft or vandalism could be an issue
- Seasonal creek flooding is problematic unless it can be controlled through pumping upstream. Seasonal flood control would have to occur for this to be a viable site
- This area is down slope from the golf course, also affecting site drainage, and surface (possibly sub surface) stability. Utility poles along the west fence of the park have sloped indicating soil movement towards the creek bed
- Further development of this site would hinder, or stop future public park programming through the creek bed. This area has topography, rare within Winnipeg. Its natural features could be utilized for public use (the Nuisance yard could be significantly reduced in size). The location could serve as a path connection from the existing formal gardens near the main park entrance, along the creek path to the Red River
- There are potential issues of hazardous materials (gas and oil) accidentally spilling into the creek, or running off of paved surfaces directly into the watershed

Site 3: Existing site of the Park Ambassador office, pump storage, irrigation lines, and park storage and works yard

Positive Attributes:

- Large scale tree removal would not have to occur due to the previous use as a maintenance yard
- Established location known to regular public users of Kildonan Park
- A mature tree buffer around the perimeter of the site provides screening
- Paving base is already established

Negative Attributes:

- Will limit potential future public use opportunities of the site (expansion of picnic areas within the forest), or expansion of pedestrian trails
- Proximity to Peguis Pavilion and pool may have negative noise pollution consequences
- As this area is very sheltered, security of equipment against theft or vandalism could be an issue
- This is a prime public use location for maintenance facility with in park, with maintenance access being difficult due to public park traffic moving about the park

Site 4: Adjacent to the parking lot used for staff for Rainbow Stage (east of the swimming pool)

Positive Attributes:

- Access is easy from pool loop road; access would be easier than current location of yard site 3
- Could use adjacent gravel overflow lot as layout space or short term storage (bedding plants) . This would have to be coordinated with Rainbow Stage
- This new facility could provide a screen for the back service zone of Rainbow Stage
- There is not an assigned park function for this particular site, meaning it will not be disruptive to preexisting programming activities
- The site is in a centralized position with in the park, with good access from all directions

Negative Attributes:

- Significant removal of mature trees would have to occur
- The edge of the building/ yard would be very close to the existing roadway
- The program mix, and potential noise pollution adjacent to the pool and Rainbow Stage may be undesirable
- This is a very public site that may find better future program uses
- Grading would need to occur on this site to allow a level surface to build upon. There is a creek bed running through this portion of the park, which adds natural character, and topography to the park. This feature would be lost with new construction
- Works yard would inhibit expansion of forest picnic area that occurs just to the east of the site

FINAL SITE STRATEGY AND RATIONAL

In keeping with the aforementioned Kildonan Park Master Plan document, the importance of this site is understood as a program edge condition into the park, and well as a specific edge condition to the formal gardens of the park. In this location, George Champion's original 1909 plan for the park called for a pavilion as the first structure park visitors would see as they entered the park through the main gates off of Main St. Today, park maintenance occupies this site, with out the aesthetic vision originally conceived. The care, detailing, material and scale of the future building form and yard on this site should carefully consider the opportunity of respecting this

original vision, as well as understand the importance of first impressions from the park visitor's perspective. As there is longstanding existing infrastructure (building and works yard) at this location, the future continued program on this site should cause no disruption to the continuity of history and present and future expectations at the park. The placement of the buildings and works yard on this site can allow an opportunity to engage the visitors of the park with a potential style of building architecture that reflects the modernist heritage of the park as seen in the newly restored Peguis Pavilion, and the existing modernist Kildonan Park pool change rooms. Further opportunities exist within the programming allow for a friendly public façade with accessible parking for the park volunteer group's office, also located adjacent to the existing Formal Gardens of the park. The yard is to be screened with a fence that mimics the building façade instead of appearing as a works yard fence. From the park, the yard is to be positioned mainly behind the buildings, with only a small percentage of the perimeter needing a fence instead of building wall.

The program for the facility is broken into two separate buildings; a staff building, and an equipment storage building. Beyond the benefits of safety, workflow and security, there could be significant energy and operations savings realized if the buildings operated on separate heating and cooling schedules as dictated through programmatic necessity and seasons.

Staff Building Rationale

The placement of the staff building allows for a glazed public presence to be shown within the main office portion of the building. Accessed publically either from the formal gardens by foot, or new accessible parking spots, the public can address the park volunteer groups or parks staff with any of their concerns. The four private offices can encompass an open area for staff meetings, reception, and daily works assignments, a lockable storage room can double as a mechanical room for the building. The office portion of the building is separate from the parks staff side, lockable through a hallway door. Mechanical services are kept to the core of the building for efficiency and division of program. The staff portion of the facility views the works yard, and opens to a seasonal covered patio area, which can also be used to store seasonal planting in the spring months before planting. The existing service path along the golf course fence enters the works yard through this section of the facility. Room is to be left in a large vestibule adjacent to the staff area for log books and key storage, functions familiar to all city works yards and programs visited.

Equipment Storage Building Rationale

The equipment storage building runs parallel to the main access road into and out of the park, acting potentially as signage for the park, and screen for works yard. The building is designed to allow the program to be physically split if needed; a division between the pickup truck garage, and the taller wash/ equipment bay and tool storage. The division, through a permanent or operable wall, would allow for a temperature differential in the winter between active and passive equipment use, storage and need. The pickup truck bays could be kept at just above freezing, while the wash bay and tool storage areas could stay warmer as program, use and equipment needs necessitate. A drive through bay is possible in the configuration of the building, as this would tie access into and out of the yard to the existing driveway infrastructure of the site.

CONSTRUCTION METHODOLOGY AND PROGRAM BUDGET

Both buildings utilize a 12' structural bay module of construction, allowing for a standard efficiency of material, sizes, and construction methodology. The works yard utilizes the existing asphalt lot on site. Repairs and some asphalt expansion will be necessary, but savings to the project budget are to be found in utilizing existing infrastructure. With a Class D gross estimation of construction costs averaged between building programs at \$200 per square foot (over 6800 total square feet), the building costs are approximately \$1 360 000. Site improvements, including site preparation, new asphalt, and asphalt resurfacing of the existing yard, fence costs, and landscape features, are in the order of \$250 000, with a total estimated construction budget (hard costs, without contingencies) of \$1 610 000.



