

APPENDIX B



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June 28, 2013

McGowan Russell Group Inc.
825 St. Joseph Street
Winnipeg, MB
R2H 3A8

Re: Conditions of Existing Pool Installation and Mechanical Scope of Work.
Our File: 33-139M

The following mechanical outline scope of work is based on non-invasive observations of the existing pool piping system at the time of the site meeting on June 11, 2013, and follow up visit on June 24, 2013. A review of the preliminary architectural sketches was conducted prior to both site visits. The comments are to be read in conjunction with the architectural and structural assessments, and include only mechanical work related to the proposed pool modifications. No evaluation of the existing pool building itself was made with respect to HVAC, plumbing, etc.

Part A: Existing Pool Configuration/Condition:

1. The existing pool systems are located in the pool service room in the basement of the pool building.
 - a. The pool heating/filtration system is less than three years old and was recently modified/upgraded to suit the installation of a new splash pad on the west side of the pool building.
 - b. All equipment appeared to be in good condition.
2. The pool supply, skimmer, and vacuum lines, and a domestic water fill pipe are routed underground from the pool service room to near the north east corner of the pool into a utility tunnel (utilidor). The utilidor is located beneath the pool deck and surrounds the pool. The lines are routed around the pool perimeter and connected to pool fixtures at various points.
 - a. The pool supply, skimmer, and vacuum piping located in the utilidor appears to be in fair to poor condition. Several broken connections and many leaks were observed.
 - b. The domestic water fill piping, valving, and pool outlet appeared to be in fair condition.
 - c. No evaluation of the underground piping could be conducted.
 - d. No evaluation of the existing pool fixtures could be conducted.
3. A water service pit containing a water meter assembly and shut off valves is located adjacent to Dale Boulevard on the east side of the pool area. A domestic water fill pipe is routed underground from this pit to the north east corner of the utilidor. An additional water fill pipe is routed from the service pit to a wading pool on the west side of the pool building.

- a. The service pit was full of water during our site visit. Piping that could be observed appeared to be in fair condition.
 - b. The domestic water fill piping, valving, and pool outlet appeared to be in fair condition.
 - c. No evaluation of the underground piping could be conducted.
4. A catch basin is located adjacent to the utilidor near the northeast corner of the pool. The pool drain line passes through the catch basin and is routed underground to the pool service room. Weeping tile from beneath the pool is routed to the catch basin. A pumped discharge line runs adjacent to the pool drain line to the pool service room.
- a. The piping, valving, and pump in the catch basin appeared to be in fair condition.
 - b. The pump appeared to be in fair condition. No test of the functionality of the pump was conducted.
 - c. No evaluation of the underground piping could be conducted.
5. Sanitary drains are located on the pool deck on all sides. The piping is hung within the utilidor and routed to the catch basin.
- a. The deck drains appeared to be in poor condition.
 - b. The deck drainage piping hung in the utilidor appears to be in very poor condition. Many pipe hangers have failed completely such that the piping has disconnected from the drains.

Part B: Recommended Remedial Mechanical Work

1. The existing pool supply, skimmer, vacuum, and domestic water piping located within the utilidor should be replaced. Refer to new mechanical work.
2. New piping connections to the existing pool fixtures including supply jets, skimmers, and vacuum outlets should be provided.
3. Existing pool fixtures including supply jets, skimmers, and vacuum outlets should be repaired or replaced as necessary. Existing leaks due to fixture age/installation should be repaired.
4. The existing deck drains should be replaced.
5. The existing deck drainage piping, hangers, and associated components should be replaced.

Part C: New Mechanical Work:

Based on the proposed architectural pool renovations and additions:

1. The existing utilidor must be extended to surround the new pool area as proposed on the architectural plan. Refer to structural.
2. The new utilidor will encompass the existing service pit containing the water meter assembly. Water service pit lines and meter assembly will require removal and replacement during construction of the extended utilidor. Reconfiguration of the

existing water lines will be necessary to accommodate new placement within the utilidor.

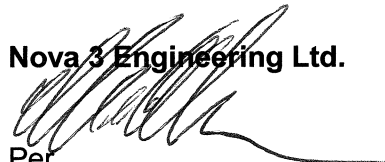
3. New pool supply, skimmer, and vacuum piping must be provided within the existing and extended utilidor for connection to existing/new supply jets, skimmers, and vacuum outlets. No new pool fixtures should be required aside from replacement of existing. Refer to recommended remedial work.
4. New drains and drainage piping must be provided for the new pool deck area.
5. **The proposed water slide will require an additional pump, separate piping line from the existing pool service room, and appropriate connection to the existing system, and appropriate controls.

Part D: Budget Pricing for Mechanical Work:

1. Remedial Mechanical Work as described.
 - a. Approximately \$65,000.00 plus GST.
2. New Mechanical Work as described (excluding waterslide).
 - a. Approximately \$35,000.00 plus GST.
3. Waterslide as described.
 - a. Approximately \$15,000.00 plus GST.

Sincerely,

Nova 3 Engineering Ltd.



Per.

Mike Hollender, P.Eng.





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To: McGowan Russell Group Inc. **33-139EC**
825 St. Joseph St. Winnipeg, MB
Attention: Susan Russell
Subject: Conditions of Existing Pool Installation and Electrical Scope of Work -
Westdale Pool, Winnipeg, MB
Date: 06/28/2013
cc: **Page 1 of 2**

Summary:

The following electrical outline scope of work is based on non-intrusive field observations of the existing outdoor pool and associated systems. Existing electrical drawings of the pool were made available, however their accuracy was not confirmed. These comments are to be read in conjunction with other discipline's reports and include only electrical work related to the proposed pool modifications. No evaluation of the existing pool building including the pool equipment itself was made.

Part A: Existing Pool Configuration/Condition:

1. The existing pool systems are located in the pool service room in the basement of the pool building.
2. The existing electrical drawings indicated lighting had once been installed within the pool, however no luminaires were observed at time of visit.
3. A service crawlspace (utilidor) is provided around the pool which houses mechanical piping. No electrical was observed within this space, other than some bare copper ground wires.
4. Four(4) post lights were observed located around the pool perimeter.

Part B: Recommended Remedial Electrical Work

1. None noted, assuming the lighting revisions that were made are code compliant and operational.

Part C: New Electrical Work

Based on the proposed architectural pool renovations and additions:

1. The new utilidor will be extended around the new pool perimeter. According to existing electrical drawings, the wiring to the post lights will be affected by this

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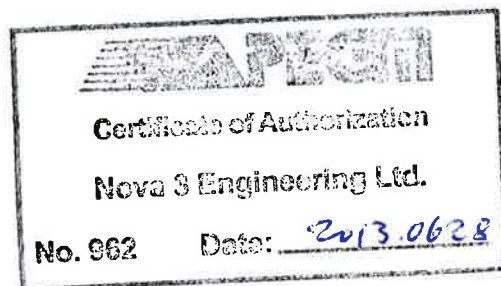
change. All existing underground utilities should be identified prior to excavation and rerouted to accommodate.

2. Pool grounding system will be required to be extended with expansion of pool area. In addition, all new drains, water slides and metallic objects within the pool or pool deck shall be bonded in accordance with the Winnipeg Electrical By-law, section 68.

Part D: Budget Pricing for Electrical Work

1. New electrical work as described: \$10,000.00

This report was produced for the exclusive use of the client to observe the existing conditions of the electrical facilities at the subject project specifically for the purpose of completing a feasibility report and is not to be used for any other purpose. The extent of review is limited to a field observation without testing or verification and limited to the best ability of the professional engineer. Any revisions contemplated to the electrical facility will require confirmation of existing conditions by the responsible professional engineer. The professional engineer does not assume responsibility for unobserved, unobservable (concealed) or post review unobserved maintenance items which could occur due to the age of the facility reviewed.



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