

November 18, 2016

Asit Dey, P.Eng  
Environmental Engineer  
Manitoba Sustainable Development  
Environmental Stewardship Division  
Environmental Approvals Branch  
123 Main Street, Suite 160  
Winnipeg, MB R3C 1A5

Dear Asit:

RE: Your File: 3960.00, Fairway Colony Wastewater Treatment Lagoon, Secondary Cell Liner

**(A)** Further to your authorization letter to Fairway Colony dated November 4, 2016, E F Moon Construction Ltd. (EFM) installed sand cover over the 30mil PVC liner during the period November 5, 7, 8, and 9<sup>th</sup>, 2016. I respond to your four (4) bullets noted:

- (1) *Address item #1, 2, 3 and 4 of the November 3, 2016 construction certification report. See Item B.*
- (2) *Remove any deleterious material from the liner prior to covering the liner with sand or other granular cover material. See Item B.3 below.*
- (3) *Take date stamped pictures prior to, during, and after placing the ballast material on top of the liner, and of other deficiencies (item #1 and 4) that were corrected. See Photo Section below.*
- (4) *Submit a final construction certification report along with the photos mentioned above and a note that all the deficiencies as outlined in the November 3, 2016 construction report have been addressed. This letter serves as EFM's construction certification report along with photos below. Deficiencies noted above were corrected (see Item B).*

**(B)** Further to the November 3, 2016 construction certificate report issued by Peter Grieger, P.Eng., South-Man Engineering, I respond to the four (4) exceptions noted:

- (1) *The interconnecting pipe between cells is to be trimmed back such that the extension beyond the interior surface is minimized once the ballast material has been installed. Once ballast material was installed, the placement of the pipe was suitable and it was not necessary to trim back the pipe.*

Continued Page 2

- (2) *Installation of the ballast material is to be performed with extreme caution so as not to damage the synthetic liner.* Ballast material was installed November 7-9 by a JD 210 excavator and D5 Cat dozer, starting at the SW corner of the lagoon to build a pathway into the cell and working our way northwards. Ballast material was consistently installed in front of our work at all times so equipment did not come in direct contact with the liner. Ballast material was loose, dry and not frozen nor clumped during installation. Ambient daytime temperatures while working onsite were consistently 14C to 20C with dry, sunny conditions. Ambient nighttime temperatures were nearing 0C to -2C but any morning frost on the liner was dissipated, and the liner pliable, before we entered the cell to install ballast or remove water. Accumulated water in the cell from an October 31 rainfall event was fluid and not frozen when we removed it by hand with submersible pumps (November 5+7).
- (3) *Deposits of stone similar to that used during installation of the gas venting system were noted on top of the liner in several locations. This stone along with any other deleterious material that may damage the liner is to be removed prior to placing the ballast material.* Stone deposits were observed in the centre and NW corner of the cell. These deposits were swept up by hand and removed during pedestrian entry into the cell following rainwater pump-out and prior to ballast installation.
- (4) *Installation of the dewatering pump and fastening of the sump cover is to be completed prior to commissioning.* The Owner Fairway Colony is responsible for installation of the dewatering pump. EFM trimmed the sump height to 1.0m above top of berm, the cover was installed by bolting, and padlocked in place before EFM left the site on November 9, 2016.

EST. 1962

CONSTRUCTION LTD.

Please let me know if you require any additional details.

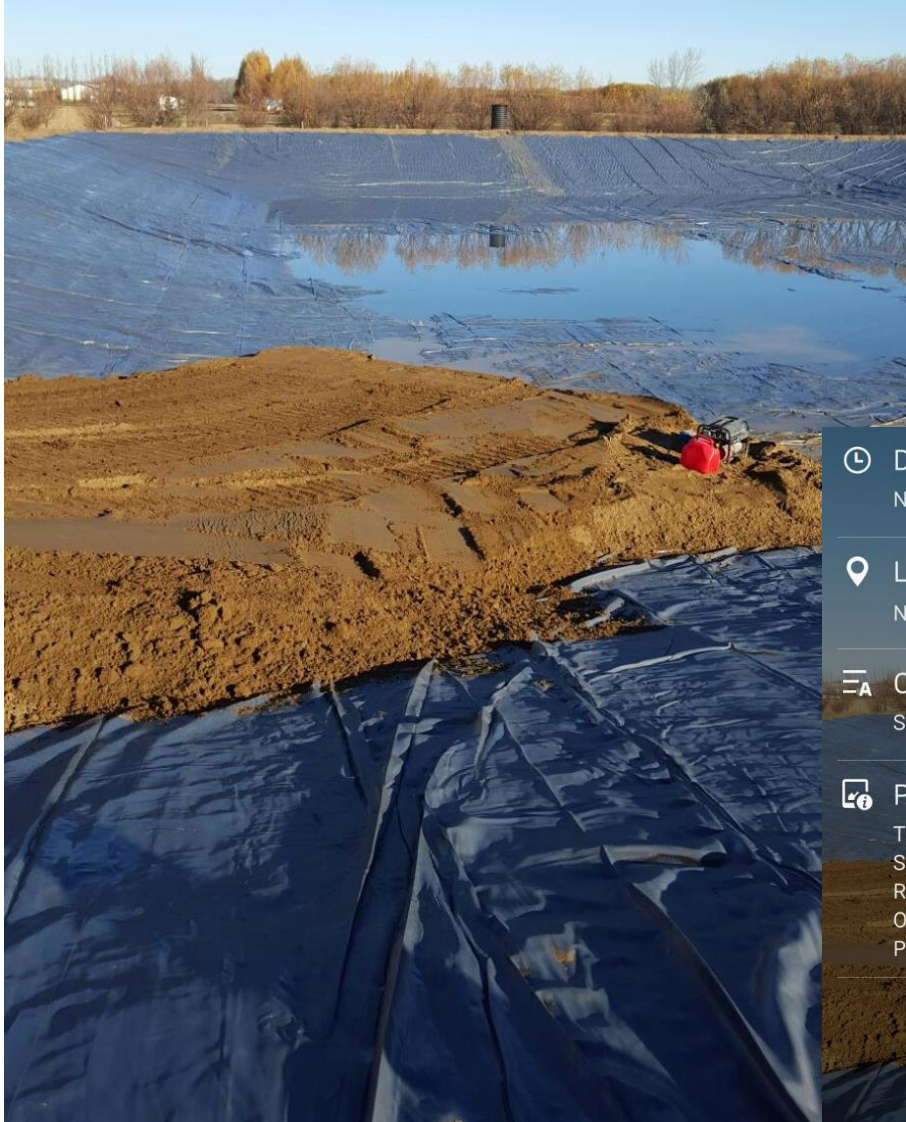
Sincerely,

**E.F. Moon Construction Ltd.**

*"original signed by"*

**Bette Nash, B.Sc**  
**Project Coordinator**

Attachments: 10 pages of photos.



November 5, 2016 at 11:02am.  
Ambient daytime temperature 19C, dry and sunny.  
Photo taken from SW corner looking north.

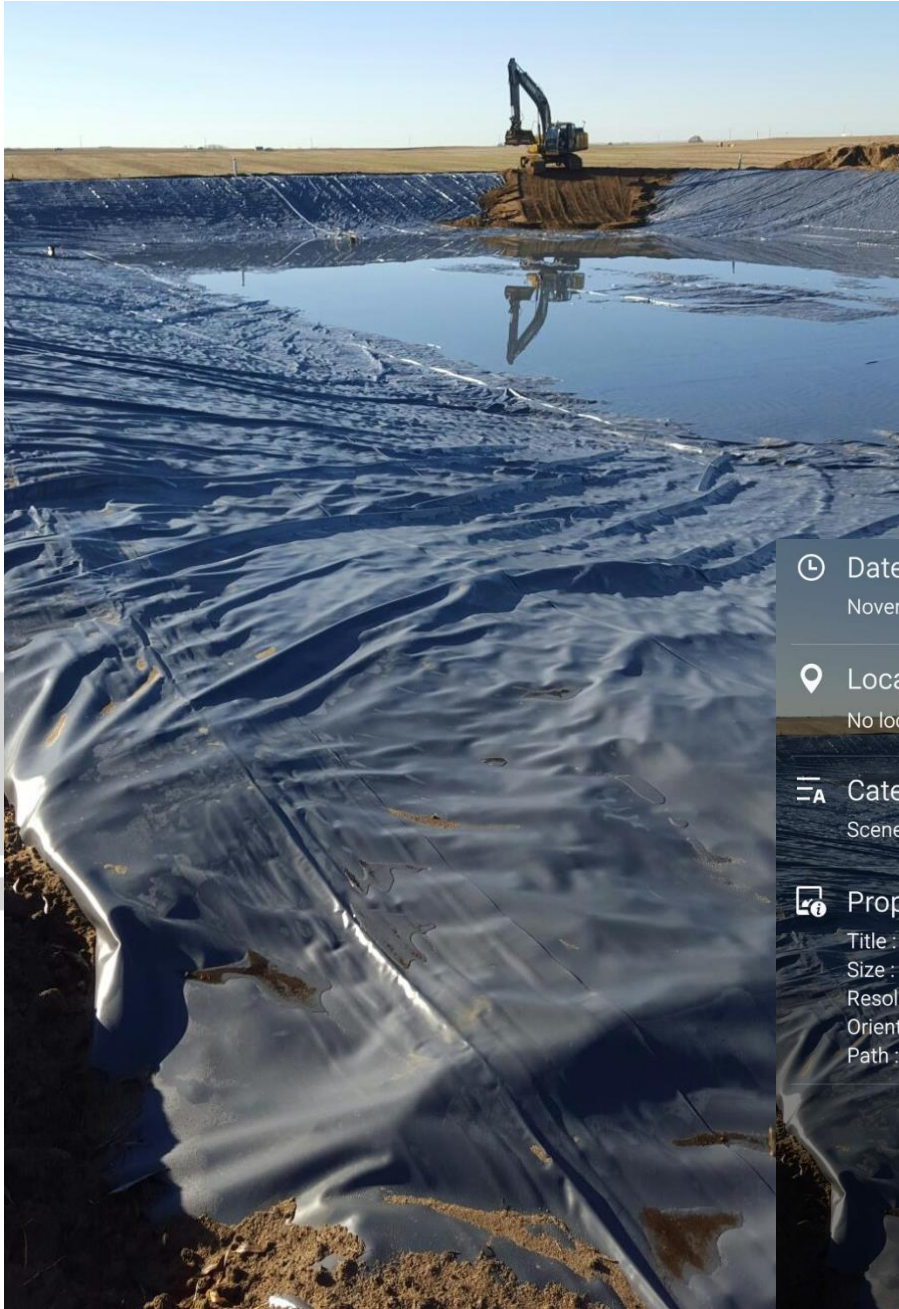
Date  
November 5, 2016 11:02 AM

Location  
No location

Categories  
Scenery

Properties  
Title : 20161105\_110206.jpg  
Size : 1.99 MB  
Resolution : 3264x1836  
Orientation : 90°  
Path : /storage/emulated/0/DCIM/Camera

Installation of ballast material to build a ramp in SW corner of cell to allow equipment and pedestrian entry into cell. Two inch submersible pumps were used to remove water accumulated in the cell from a rain event on October 31. Water was fluid and not frozen when we entered the cell.



November 5, 2016 at  
11:05am.  
Ambient daytime  
temperature 19C, dry and  
sunny.  
Photo taken from NE  
corner looking south.

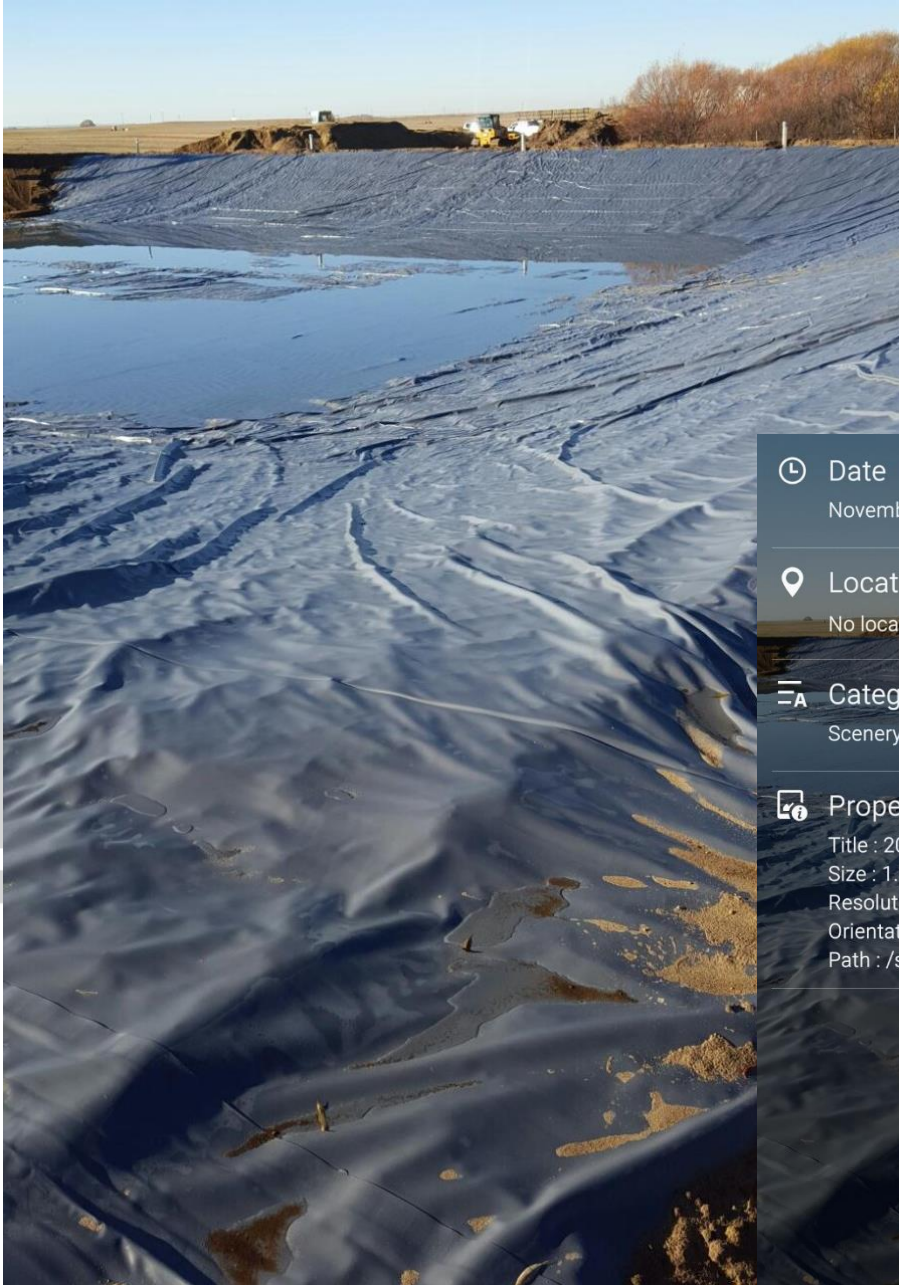
Date  
November 5, 2016 11:05 AM

Location  
No location

Categories  
Scenery

Properties  
Title : 20161105\_110542.jpg  
Size : 1.73 MB  
Resolution : 3264x1836  
Orientation : 90°  
Path : /storage/emulated/0/DCIM/Camera

Two inch submersible pumps were used to remove water accumulated in the cell from a rain event on October 31. Water was fluid and not frozen when we entered the cell.



November 5, 2016 at  
11:05am  
Ambient daytime  
temperature 19C, dry and  
sunny.  
Photo taken from NE  
corner looking SW.

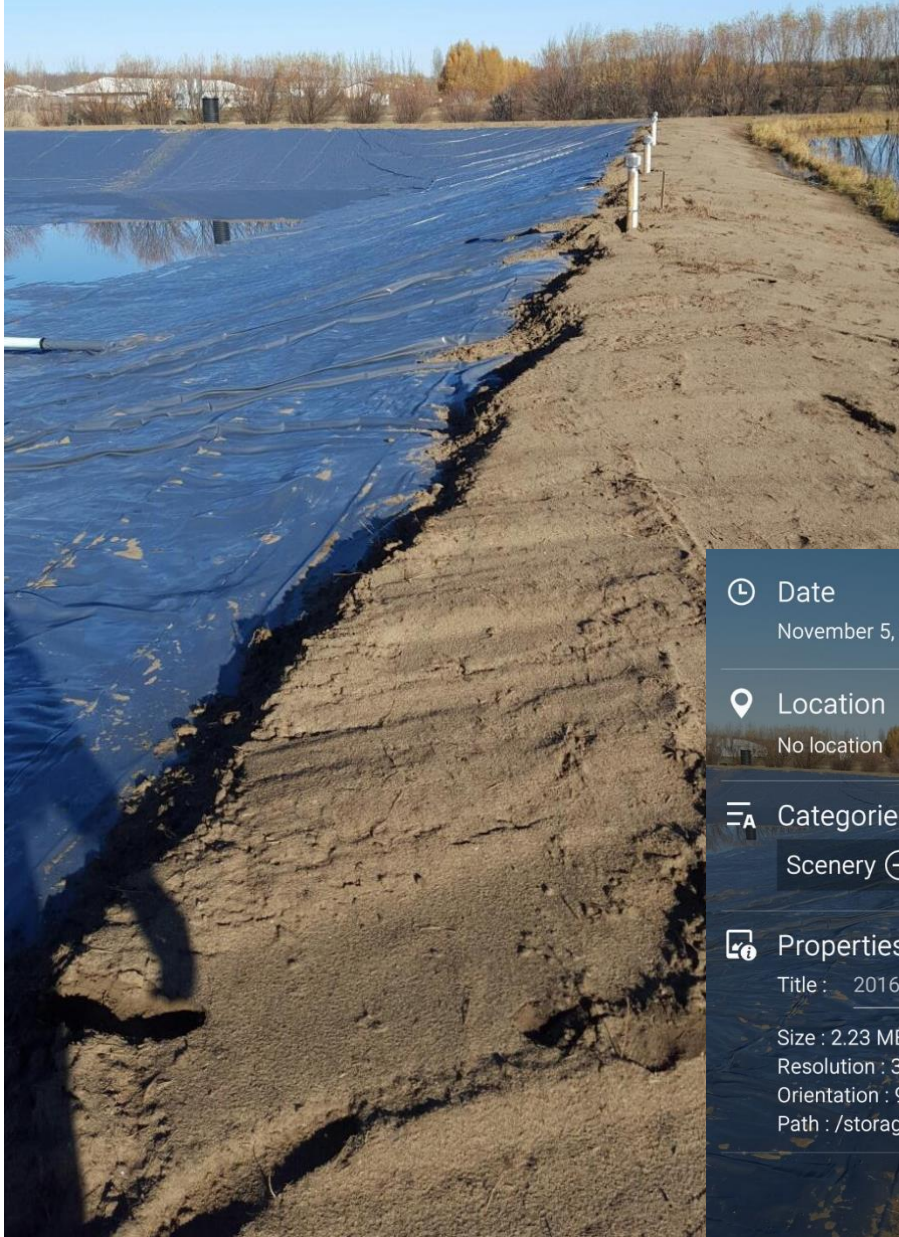
Date  
November 5, 2016 11:05 AM

Location  
No location

Categories  
Scenery

Properties  
Title : 20161105\_110544.jpg  
Size : 1.86 MB  
Resolution : 3264x1836  
Orientation : 90°  
Path : /storage/emulated/0/DCIM/Camera

Two inch submersible pumps were used to remove water accumulated in the cell from a rain event on October 31. Water was fluid and not frozen when we entered the cell.



November 5, 2016 at 11:04am  
Ambient daytime temperature 19C, dry and sunny.  
Photo taken from SE corner looking along east berm anchor trench.  
Gas vents along east berm are visible.  
Interconnecting pipe is visible.

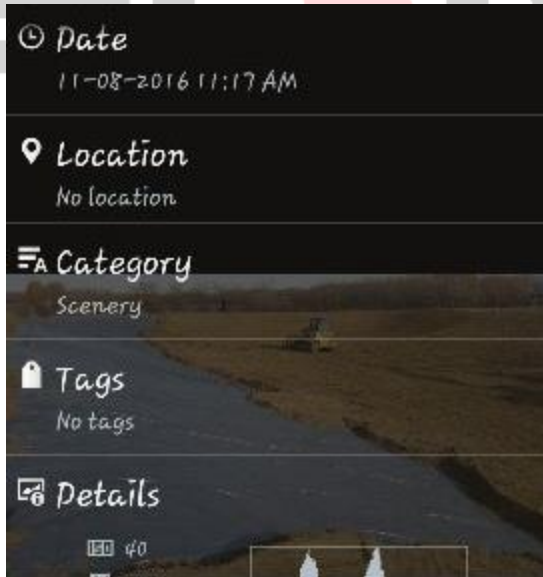
**Date**  
November 5, 2016 11:04 AM

**Location**  
No location

**Categories**  
Scenery

**Properties**  
Title : 20161105\_110434.jpg  
Size : 2.23 MB  
Resolution : 3264x1836  
Orientation : 90°  
Path : /storage/emulated/0/DCIM/Camera

Two inch submersible pumps were used to remove water accumulated in the cell during from a rain event on October 31. Water was fluid and not frozen when we entered the cell.



November 8, 2016 at 11:17am.  
Ambient daytime temperature 14C, dry and sunny.  
Photo is taken from SW corner looking north.  
Installation of ballast material is completed from centre  
of cell to east berm.



**Date**  
11-08-2016 11:17 AM

**Location**  
No location

**Category**  
None

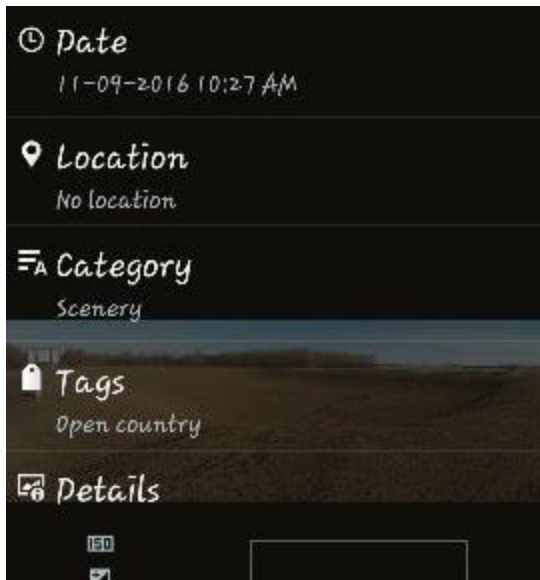
**Tags**  
No tags

**Details**

ISO 40

November 8, 2016 at 11:17am.  
Ambient daytime temperature 14C, dry and sunny.  
Photo is taken from SW corner looking east.  
Installation of ballast material is completed except for SE corner of cell.





November 9, 2016 at 10:27am.  
Ambient daytime temperature 20C, dry and sunny.  
Photo is taken from SW corner in panoramic view to show complete cell.  
Installation of ballast material is completed.  
Gas vents along west berm are visible.  
Interconnecting pipe through east wall of cell is visible.



**Date**  
11-09-2016 4:15 PM

**Location**  
No location

**Category**  
Scenery

**Tags**  
Open country

**Details**  
ISO 40

November 9, 2016 at 4:15pm.  
Ambient daytime temperature 20C, dry and sunny.  
Photo is taken from north berm, looking to SE corner.  
Installation of ballast material is completed.  
Interconnecting pipe is visible.



November 9, 2016 at 4:14pm.  
Ambient daytime temperature 20C, dry and sunny.  
Photo is taken from west berm looking east.  
Installation of ballast material is completed.  
Interconnecting pipe is visible.



November 9, 2016 at 4:15pm.  
Ambient daytime temperature 20C, dry and sunny.  
Photo taken on north berm looking east.  
Sump is trimmed to 1.0m above top of berm.  
The cover is bolted in place, and was padlocked when EFM left site.  
The Owner Fairway Colony is responsible for installation of the dewatering pump.

END OF REPORT/PHOTOS.