
To:	James Durian, CEO	From:	Ken Jewison, Greg Schell
	MAEDA		Stantec
File:	2075158900	Date:	March 6, 2024

Reference: Construction Lighting – BlueOval Battery Park Michigan Project**Background and Purpose**

Stantec Consulting Michigan Inc. (Stantec) is retained by the Marshall Area Economic Development Alliance (MAEDA) to provide construction administration and inspection services for the Pad Ready Site scope of work associated with the BlueOval Battery Park Michigan (BOBPM) project under construction at the Marshall Area Jobs, Opportunity and Recreation (MAJOR) campus site. Stantec also serves as Owner's Advisor to MAEDA.

The City of Marshall (City) first received complaints related to construction lighting at the site from neighboring residents in December 2023, and again February 2024. In response to these complaints, Stantec performed field investigations, compiled observations, and consulted with the General Contractor, Walbridge Aldinger LLC (Walbridge) to gain an understanding of their approach to the selection, layout, and employment of the component elements that comprise the temporary construction lighting system on the Project site. Based on these observations, Stantec prepared the following brief report to summarize findings and to outline a path forward to help address concerns as the Project moves forward.

December 2023 Conditions

In early December 2023, the City received complaints from residents in the area about excessive lighting at the site. Stantec made a pre-dawn tour of the site and the two residential neighborhoods on A Drive North, east of 15 Mile Road. Stantec issued a statement of findings and noted that some of the lighting, when observed from offsite, was visible but not overly bright. At the same time, Walbridge also inspected the site, made observations, took photographs from several locations, and adjusted the location and orientation of the temporary lighting throughout the site. Copies of Walbridge site photographs from December 2023 are included as an attachment.

February 2024 Conditions

On February 27, 2024, Stantec conducted a pre-dawn tour of the Project site and made observations of the site lighting from the two residential neighborhoods off A Drive North. In general, the site lighting conditions were similar to what was observed in December 2023. One exception would be the addition of new pole mounted lighting in the parking areas along the north side of the Production Facility work area and the Contractor's office trailer and maintenance complex on the east side of the site. The new parking area lighting features downward pointing, low profile/shielded fixtures, that comply with City ordinance.

It was notable that the Production Facility work area did not have temporary construction phase lighting. Neither of the two building sections under construction nor the areas with ongoing foundation were illuminated, possibly due to the relatively early stages of construction for these work items.

Observations of the temporary construction phase lighting were made from locations along the south property line of the project site, including the southeast corner of the site. Most noticeable was the illumination from the portable light towers being used at key locations throughout the site to provide additional safety and security lighting. These units are being employed to provide increased illumination to enhance safety and security, particularly during overnight hours.

The Contractor has reported incidents of theft and vandalism and has added lighting and security personnel to help mitigate the risk of additional incidents. The lighting also is being used to enhance the safety of workers

Reference: Construction Lighting – BlueOval Battery Park Michigan Project

during low light periods at the start and end of the workday, particularly during the late fall through spring when the hours of daylight are reduced.

Additionally, Walbridge has continued to inspect the temporary construction lighting, and has made additional adjustments to proactively address concerns of area residents, while attempting to balance these concerns with the need to maintain a safe and secure work site. Photographs from Walbridge's March 1, 2024, site inspection are included as an attachment.

Future Conditions

As previously noted, the Production Facility work area is not currently illuminated. As construction continues at the Project site, Walbridge anticipates that this will change when new temporary construction phase lighting is installed to accommodate the increased pace of work as additional activities begin, including the installation of floors, roofing materials, interior walls, exterior walls, and siding, building mechanical, plumbing, and electrical systems.

In addition, as the Pad Ready site improvement work continues around the Production Facility, additional temporary construction site lighting will likely be needed and installed to illuminate the work areas to enhance safety and help mitigate ongoing site safety concerns for workers, visitors, equipment, vehicles, office and maintenance facilities, and construction work that has been completed or is in process.

Summary and Conclusions

Based on our observations of the conditions on the site, we assess that the Contractor continues to balance the need to minimize the amount of light coming from the site while providing a safe and secure work area for those working on or visiting the project site. Overall, the Contractor's temporary construction site lighting appears to be in accordance with standard construction industry practices and does not currently generate or project an excessive amount of light beyond the boundaries of the Project site. We anticipate that the Contractor will need to continue monitoring and adjusting the temporary construction phase site lighting and that they will have to do so throughout the remainder of the Project. Stantec will continue to monitor construction site lighting and work closely with Walbridge to address issues that may arise as work proceeds on this project.

Stantec Consulting Michigan Inc.



Gregory C. Schell
Senior Project Manager



Kenneth D. Jewison, PE
Principal, Program Manager

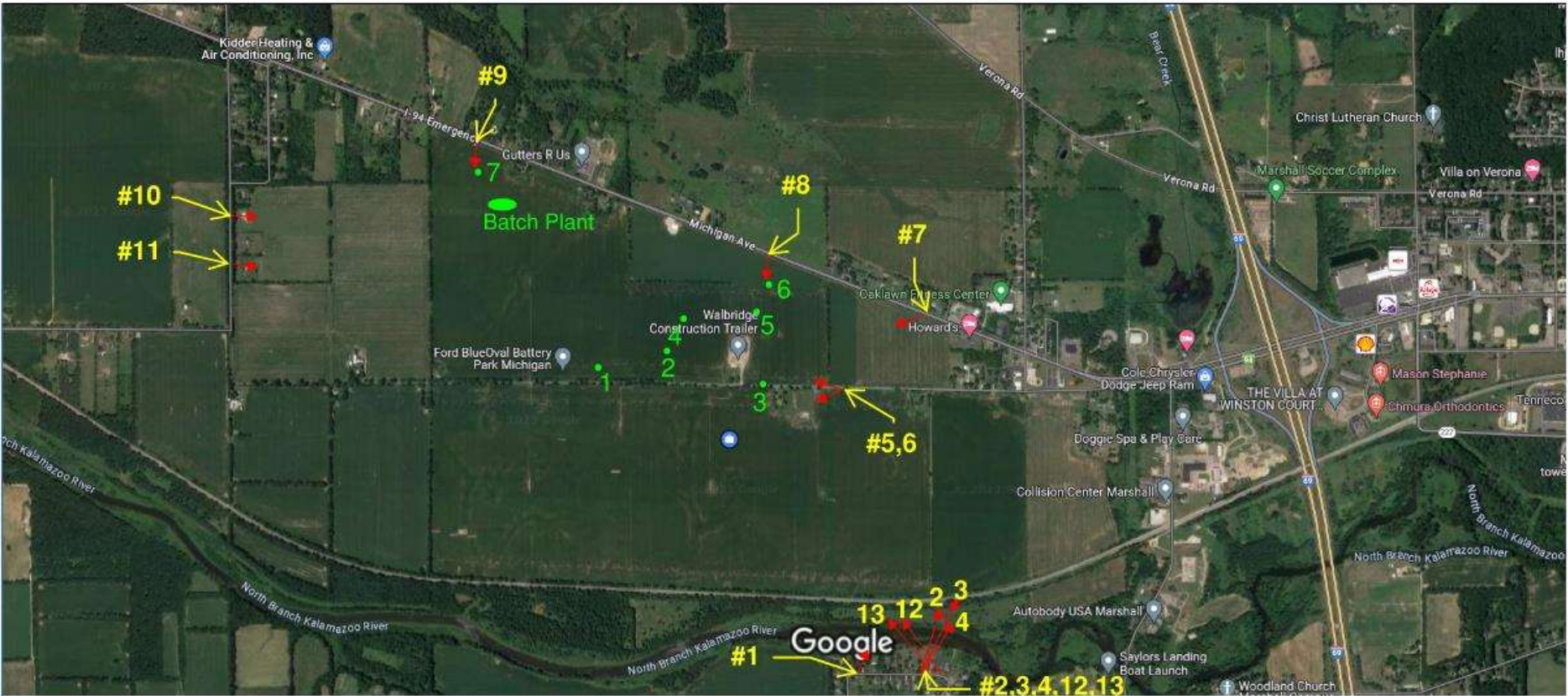
Attachments: Attachment A – Previous Conditions Temporary Construction Phase Site Lighting Photographs (Walbridge, December 12, 2023)
Attachment B – Current Conditions Temporary Construction Phase Site Lighting Photographs (Walbridge, March 1, 2024)

- c. Derek Perry, City of Marshall
- Marguerite Davenport, City of Marshall
- Eric Zuzga, City of Marshall
- Kenneth Pontius III, Walbridge
- Derek Dalton, Stantec

ATTACHEMENT A

**PREVIOUS CONDITIONS TEMPORARY CONSTRUCTION PHASE SITE LIGHTING
PHOTOGRAPHS (WALBRIDGE, DECEMBER 12, 2023)**

Google Maps



Imagery ©2023 CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2023 1000 ft

A dark night photograph of a residential area. In the foreground, a mailbox with the number '21' is visible on the right. In the background, there are some lights, including two red lights on the left and a cluster of white lights in the center. The sky is dark and cloudy.


Residential Garage Lights

Marshall Township Businesses

#1

Marshall Township Businesses

#2



Marshall Township Businesses

#3

Marshall Township Businesses

#4

Worker's Arriving (Not Overnight Lights)

Trailer City Wall Lights

United Rental Exterior Garage/Trailer Lighting

3

2

4

7

#5



Consumer's Energy Jobsite

3

5

4

6

Batch Plant

#7

A nighttime photograph of a gate structure, likely a dam or lock gate, illuminated by several lights. The structure is a long, low profile with a central section that appears to be a gate. Three specific lights are labeled with green numbers: '5' on the left, '6' in the center, and '4' on the right. The lights are reflected in the dark water in the foreground. The sky is black, and the overall scene is dark.

Gate 2

#8

Batch Plant

7

Security
vehicle

Steel Delivery

Gate 3

#9

7

Batch Plant

Trailer City

Worker's Arriving (Not Overnight Lights)

#10

7

Batch Plant

Trailer City

Worker's Arriving (Not Overnight Lights)

#11

Project Light's

#12

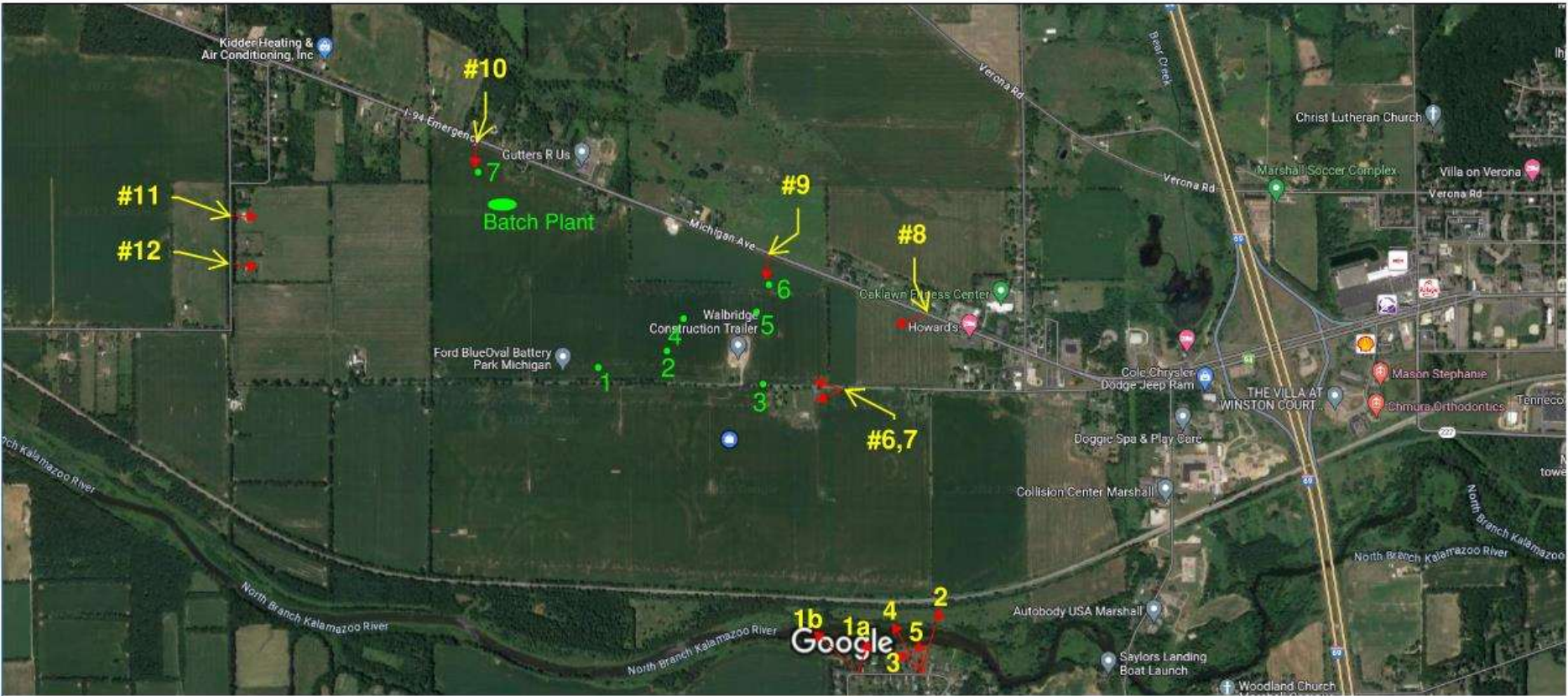
Project Light's

#13

ATTACHEMENT B

**CURRENT CONDITIONS TEMPORARY CONSTRUCTION PHASE SITE LIGHTING
PHOTOGRAPHS (WALBRIDGE, MARCH 1, 2023)**


Google Maps



Imagery ©2023 CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2023 1000 ft

Marshall Township

#1a

A dark, grainy night photograph of a landscape. In the center, there is a faint, distant light source, possibly a building or a fire, which is highlighted by a green text label 'Project Site'. The surrounding area is mostly black, with some faint, blurry lights visible in the distance. The overall image has a low-contrast, high-contrast appearance typical of night photography.

Project Site

A night photograph of a residential street. On the left, a house is illuminated with warm, orange light. A tree in front of it is also lit with warm light. To the right, another house is visible, partially obscured by a large, dark evergreen tree. The sky is dark, and the overall scene is dimly lit, with the primary light sources being the house lights and the tree lights. The text "Marshall Township" is overlaid in green in the center-right area.

Marshall Township



Project Site

Project Site


A dark, grainy night photograph of a landscape. In the center, there are a few small, bright lights that appear to be distant buildings or structures. The overall scene is very dark, with some faint, indistinct shapes in the background.

Project Site



A nighttime photograph of an industrial facility. In the center, a multi-story building is brightly lit and labeled "Cell Plant" in green text. To the left, there are other industrial structures and utility poles. To the right, a "ROAD CLOSED" sign is visible. The foreground is dark, and the sky is black.

Cell Plant




A nighttime photograph of an industrial or construction site. The scene is dark, with the ground and sky appearing as deep black. In the middle ground, a long, low building is visible, illuminated by several bright, warm-white lights. The building has a flat roof and appears to be made of metal or concrete. To the left of the building, there is a series of vertical poles or lights that form a line. To the right, there are more lights, some of which are very bright and create a lens flare effect. The overall atmosphere is quiet and industrial.

Barn Office

Cell Plant





A nighttime photograph showing a dark landscape with a line of lights on the horizon. The lights are concentrated in the center-right area, with a few smaller lights to the left. The sky is dark, and the foreground is mostly black, with some faint, reddish-brown textures visible in the lower-left corner.

Cell Plant



Cell Plant