

ENVIRONMENTAL CONTROL ADVISORY BOARD

MINUTES OF JULY 17, 2019

Item No. 1 being:

ROLL CALL

The Environmental Control Advisory Board of the City of Norman, Cleveland County, State of Oklahoma, met in Regular Session at the City of Norman, in the Study Session Room, Norman Municipal Building, 201 West Gray Street on July 17, 2019 at 5:30 p.m. Notice and Agenda of the meeting were posted at the Norman Municipal Building at 201 West Gray, 24 hours prior to the beginning of the meeting.

MEMBERS PRESENT Amanda Nairn (Chair)
 Matthew Rom (Vice-Chair)
 Eli Bridge
 Patricia Edge (left at 6:15)
 Dane Heins
 Andrew Sartain

MEMBERS ABSENT Larissa Balzer
 James Harp
 Aaron Pilat

STAFF MEMBERS PRESENT Chris Mattingly, Capital Projects Engineer
 Carrie Evenson, Stormwater Manager
 Michele Loudenback, Stormwater Program Specialist
 Jane Hudson, Interim Planning Director
 Bob Christian, Permit Manager
 Terry Floyd, Development Director
 Nathan Madenwald, Capital Projects Engineer

Item No. 2 being

INTRODUCE GUESTS

Bruce Prescott, Ready For 100, Solar Schools
Tod Hanley, Delta Energy
Pieter Huebner, Off Grid Enterprises
Justin Huebner, Off Grid Enterprises
Lee Fithian, Ready For 100
Tom McCurdy, Oklahoma Gas and Electric (OG&E)
Katherine Currey, OU student

Item No. 3 being:

APPROVAL OF THE MINUTES OF JUNE 19, 2019 MEETING

Rom made a motion to approve the June 19, 2019 minutes. Edge seconded. There being no further discussion, a vote was taken with the following result:

YEAS Amanda Nairn
 Matthew Rom
 Eli Bridge
 Patricia Edge
 Dane Heins
 Andrew Sartain

NAYS None

The motion passed by a vote of 6 to 0.

Item No. 4 being:

DISCUSSION WITH CITY STAFF REGARDING REQUIREMENTS FOR SOLAR PANEL INSTALLATION

Nairn stated that city staff Jane Hudson, interim Planning Director, and Bob Christion, Permit Manager, were invited based on some of the questions raised at the last meeting. She said the main questions were the state licensed electrical contractor requirements, the wet stamp and the request for a checklist of requirements for the installation. Bob Christion gave a brief background and said city staff did not have a great deal of experience with solar installations until around 2017. Unfortunately, some installation practices were questionable. At that time, they were also in the midst of updating the building and trade codes so they were in a transition period. The 2015 International Code Council (ICC) code was adopted which included the 2014 National Electric Code. These codes were pertinent because they have varying requirements for solar systems. Prior to this, there was not much guidance. Initially they thought they could probably accommodate the solar contractors doing a major portion of the installation. That came under question so the city inquired the Construction Industry Board (CIB) to see if there were any license requirements. The city's first understanding of allowing the solar contractors do the work was in violation of state law unless they were a licensed electrical contractor because the state considered this an electrical installation. The city sent information to the solar contractors in 2018 and invited the CIB and other interested parties to discuss the requirements. Some of the solar contractors hired electrical contractors thus satisfying the state rules. Unlicensed contractors could sell the products but couldn't do the installations. The ICC provided training for the city inspectors. Another concern for the city was how to best assess the load on an existing structure, or a stand-alone structure that was built for the solar panels. There were a variety of structures being used. The entire panel doesn't sit on the roof but sits on supports attached to the roof. This is a point load since the load wasn't distributed uniformly by the entire panel so there was concern over the actual load being applied. There were not prescriptives in the building code on how to deal with this. Access to the roof is limited for inspection because of the Safety Code. They also looked at best practices of the National Renewal Energy Lab and other resources to determine what was in the best interest of the public, to insure their safety and to insure that best practices were being employed to evaluate the structure. They concluded, based on building codes, you follow accepted engineering practice. In Oklahoma the accepted engineering practice is for a professional engineer to evaluate the structure to determine if the roof can accommodate the installation so that is what Norman decided to do. They were also unfamiliar with the photovoltaic systems themselves. Norman saw many different products and configurations. Initially, to make sure they had a code compliance system a professional engineer was required to sign off on these. After experience with the systems and having an opportunity to see the literature from manufacturers, Norman backed off on that requirement as long as the installers provided

drawings, etc. Oklahoma City has a similar process as Norman's and other cities around the state are beginning to have a more uniformed process. One thing they can do to improve information conveyance is to put together a list of items required for application for building permit. The permitting process does require a building permit because of structures being involved and it requires an electrical permit because of the state licensure law. Norman decided that on the building application form they would require a licensed electrical engineer to be listed. The electrical engineer must be on staff of the company and have oversight of the installation. The city requires, in addition to the permits, a site or roof plan. A detached structure can act as a wind sail and resist uplift. It has to be anchored adequately. An existing detached structure, pergola, requires a structural engineer. The panels installed affect that structure. Another item on the list is an electrical schematic to give them the understanding of how it will work. They also require a complete listing of manufacturer's products information sheets so it can be determined the standards are being met. A depiction of signage is needed to help insure the safety of the system. This may result in 50 pages. Some of the counter staff don't have a lot of electrical expertise so they have to rely on other staff. This can slow down the process of approval. With regard to the structural engineering, based on state licensure laws, the standard of care must be site specific. There are some cases where as long as they are installed with established parameters a structural engineer isn't required. Norman will explore this a little more. He said if a group of solar installers want to meet with staff to discuss, he would welcome. City staff don't want to give the impression or experience the reality of being somewhat against solar. That is not their intent at all. He said their full intention is to insure safety and reliability of structural components. Nairn asked how many inspections would it be to approve the permit and he said they were able to take care of the building and electrical inspection in one visit. The electrical contractor needs to be onsite for the application. Bridge asked what the process would be to create the checklist and Christian said it was his decision. An appeal can be made. California has a wide range of prescriptive requirements he will research.

Item No. 5 being:

SUBCOMMITTEE FOR US MAYORS' CLIMATE PROTECTION AGREEMENT REPORT

Rom said one of the topics involves recycling and having a household hazardous waste collection event more than once a year. Madenwald is planning a permanent location for household hazardous waste collection. The project is being kicked off July 22 with the consultant. The consultant will do a preliminary design, make sure it fits our need, and proceed from there. It will be located behind the gatehouse at the Transfer Station. Many details need to be decided such as days open, times, what we will take, what we will charge. Nairn stated that we need to be sure and take things that you can't dispose of anywhere else. The plans are to have a place for residents to come pick up good product. Nairn suggested moving past the renewables and proceed with the other recommended action items.

Item No. 6 being:

DISCUSS REDUCTION OF HERBICIDE USE ON CITY PROPERTY AND POSSIBLE ACTION

Nairn, Smith and Mattingly met with Terry Floyd. Floyd is responsible for the remodeling of the city complex. Nairn mentioned that ECAB was interested in putting a rain garden and/or pollinator garden in the area east of Building A. It is possible that he will have money to help with this. There may also be solar installed on the building if possible. Nairn suggested waiting to discuss the reduction of herbicide use since there are so many changes occurring in this area.

Item No. 7 being:

DISCUSS SOCIAL MEDIA TOPICS

Sartain said he could make a video on how to submit a nomination for the Landscape Award and submit it to Annahlyse Meyer, Chief Communication Officer for the city so she can put it on Facebook.

Item No. 8 being:

DISCUSS LANDSCAPE AWARD

Sartain said the application was simple (attached) and he made a few changes. Something related to aesthetics need to be added. The purpose of the award is to show that a sustainable yard can still be aesthetically pleasing. We also need to add that the winner will receive a sign for their yard. Sartain will make these changes. Smith will talk to IT about creating an online application for residents to use. Pictures will need to be included also.

Heins made a motion to approve the Sustainable yard of the Month Award guidelines. Rom seconded. There being no further discussion, a vote was taken with the following result:

YEAS Amanda Nairn
 Matthew Rom
 Eli Bridge
 Dane Heins
 Andrew Sartain

NAYS None

The motion passed by a vote of 5 to 0.

Smith said there is a nomination (attached) she received by email. The house is located at 1632 S. Berry. The water-wise features include perennial drought-tolerant plants, no chemical use, use of rain barrels, pollinator-focused planting, and use of mulch. Sartain will take the sign and rain barrel to them and he will make a video to put on Social Media. Sartain made a motion to approve Kat Romero, 1632 S. Berry Rd, as the recipient of the Sustainable Yard of the Month Award. Bridge seconded. There being no further discussion, a vote was taken with the following result:

YEAS Amanda Nairn
 Matthew Rom
 Eli Bridge
 Dane Heins
 Andrew Sartain

NAYS None

The motion passed by a vote of 5 to 0.

Item No. 9 being:

MISCELLANEOUS DISCUSSION

Currey came to the meeting because she was interested in the City of Norman's sustainability efforts. She didn't have any questions. Nairn suggested she look at the US Mayors' Climate Protection Agreement. Smith will send her a copy.

Smith informed the board that Bridge and Edge have both resigned so there are two vacant positions for the board.

Evenson and Loudonback went to a Stormwater conference and learned about Broken Arrow's school wide art contest to come up with an anti-litter campaign called "Stash the Trash". They had signs made to put around town. Nairn suggested altering the current poster contest to do something like this with watershed signs. The City of Broken Arrow worked with the public schools to design, create, and put a floating wetland in a park. They used the city's logo, BA, and it can be seen on google from space. COMCD worked with Jason Vogle, OU Professor, to install a wetland to slow down erosion at the lake. COMCD also got a grant from the Bureau of Reclamation to assist with this.

Nairn told the group about a Smithsonian display on water at the east side Library. Several City of Norman employees are speaking at this.

Item No. 10 being

QUESTIONS FROM THE PUBLIC

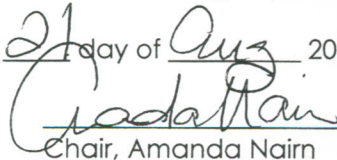
None

Item No. 11 being:

ADJOURNMENT

There being no further business, the meeting adjourned at 7:10 p.m.

Passed and approved this 21 day of Aug 2019.



Chair, Amanda Nairn