

Memo

To: James Fentress, PE
From: Nicole Smith Associate Planner; 910-341-1611
CC: File;
Date: 3/31/2021
Re: Cape Fear Solar Systems

The following is a list of comments for review from planning regarding the project. Please provide your corrections as listed below. A staff summary of comments:

Staff	Department	Notes
Nicole Smith	Planning, Plan Review	See comments attached
Eric Seidel	Engineering	See comments attached
Chris Walker	Fire	See comments attached
Mitesh Baxi	Traffic Engineering	See comments attached
Bill McDow	Transportation	See comments attached

To: Jams H. Fentress, PE
From: Nicole Smith, Associate Planner; 910-341-1611
CC: File;
Date: 3/31/2021
Re: Cape Fear Solar Systems

The following is a list of comments for review from planning regarding the project. Please provide your corrections as listed below. Additional review will be required once all the needed documents have been provided. Items or documents not provided on initial submission will be subject to further review. Please contact me for any further questions.

Site Plan Comments:

- Sec. 18-60 (c) (5): Additional information is the site data table as follows:
 - Add proposed setbacks to site data table. Difficult to read with all of the layers on site plan. **Repeat comment.**
 - Off street parking calculations, including required amount of parking, UMX does not have a minimum parking requirement and proposed amount of parking and the basis for determination. The maximum parking for each use will still apply. Please provide a breakdown on the square footage of each use. **Repeat comment. Data provided is using minimums. There is no minimum parking requirement in the UMX district. Warehouse max: 36; Office max: 41; Residential max is 25. Total max is 102 based on identified uses.**
- Sec. 18-60 (c) (10): Show Location and dimension of, loading and unloading facilities. **Repeat comment.**
- Show bicycle parking compliance. **Repeat comment. UMX has different requirement. Reference Sec. 18-204(c)(6)(b)**
- Sec. 18-504: Show compliance with screening of dumpsters with living **and non-living material. Repeat comment. Refence Sec. 18-204(c)(7)(e)**
- An updated tree preservation/removal permit is required for site work. Please provide updated tree removal plan in the next submittal. Mitigation calculation shown on the Landscape plan do not match approved tree removal permit for excavation wall only.

Landscape Plan to Include:

- Street trees. **Repeat comment. Provide calculations.**
- Foundation plantings. **Repeat comment.**
- Sec. 18-462 (d) (3): Show approximate locations, species and critical root zones of all protected trees. Groves of protected trees that will not be disturbed may be labeled as such on the map, stating the approximate number of protected trees and species mix, without specifying data on each individual tree. **Repeat comment.**

- Sec. 18-462 (d) (5): Show locations, dimensions and square footages of required bufferyards and parking lot landscaping. Submit technical memo for any waivers you desire from the buffer and parking lot landscape requirements. **Repeat comment.**
- Sec. 18-462 (d) (6): Show details of required landscaping showing species, dimensions, and spacing of planted materials and the use **and protection of existing vegetation.** **Repeat comment.**
- Sec. 18-462 (d) (10): Show approximate locations of all trees greater than eight (8) inch DBH within the required buffers and of all-natural vegetation to be used part of the buffer. **Repeat comment.**
- Sec. 18-462 (d) (12): Show locations of any Conservation Resources associated with the parcel including any Rare and Endangered species in accordance with the North Carolina Wildlife Resource Commission. Site plan shows potential pocket of wetlands. Please provide a delineation. **Repeat comment.**

UMX (Sec. 18-204):

- Provide all building heights and setbacks from single family zoning adjacent properties. **Repeat comment.**
- Elevations to ensure code compliance. Address massing and scale per Sec. 18-204(d)(2)
- Sidewalk width on 2nd Street

Special Use Permit (SU-6-1119):

- Add conditions to the plan set. **Repeat comment.**
- Add notation with regard to the limited hours for deliveries per condition 8. **Repeat comment.**
- Add details of the required vegetative buffer established in condition 9. **Repeat comment.**
- Add details of NCDOT project U-5734 per condition 11. **Repeat comment.**

Tree Removal Plan:

- Provide mitigation calculations and tree credits. **Repeat comment. Tree removal plan needs to be included in all submittals.**

Engineering has reviewed the plans for the Cape Fear Solar project submitted March 17, 2021 and have the following comments:

Stormwater Management Permit Application Form:

- 1) II. Permit Information; Line Item 3: Check 404/401 Permit box if wetland is to remain disturbed.
- 2) IV. Project Information; Line Item 8: Newly Constructed impervious surface numbers need to match Impervious Surface Summary Table provided on construction plan sheet 1 of 10.

Narrative:

- 3) The narrative indicates wetlands do exist on site, please Provide JD along with Army Corps/DEQ wetland disturbance permits. All proposed improvements such as grading, piping, and riprap need to be removed from the wetlands unless a disturbance permit has been applied for and approved.

Stormwater Calculations:

- 4) Provide Geotechnical Report. Within email correspondence, provided within the submittal package, ARM states that a full report would be forthcoming. This report needs to be submitted showing boring locations, infiltration rates, and SHWT.
- 5) All impervious surface from DA C need to be treated. This is a High-Density stormwater project and all proposed BUA must be treated by a primary SCM. A treatment swale is only a secondary SCM which can be used for volume reduction within a treatment train but not full treatment.
- 6) Provide Pre/Post Summary Table. Update Table once a primary treatment device is provided and routed for DA C.
- 7) Identify DA C on a Drainage Area Map.
- 8) Post Calculations show weighted C for DA C as 0.30 – this seems to be very low considering the home being installed.

Supplement:

- 9) Remove treatment swale and add primary SCM data for DA C.
- 10) The BUA breakdown matches the application but not the Impervious Surface Table provided on the Construction plans. Please clarify.

O&M

- 11) Provide additional O&M when primary SCM has been determined for DA C.

Plans:

- 12) Existing Conditions / Grading: Has an official determination been made for the onsite wetlands adjacent to Dawson Street? All grading and piping must be removed until an official determination has been made.
- 13) Existing Conditions / Site Plan: Why are the potential wetlands labeled as a Stormwater BMP?
- 14) Where is the proposed Tree Protection? Tree protection must be shown on construction plans.
- 15) Site / Grading Plan: Retaining wall proposed along 2nd Street driveway must be removed from the right-of-way. To allow for tree save a conditional approval is proposed to eliminate the wall and sidewalk, between the two driveways on 2nd Street, until commencement of Phase III construction.
- 16) Grading Plan: The proposed 3:1 / 5:1 grassy treatment swale is not shown on plans. This proposed swale, described in the response letter, cannot be used as a primary SCM.

- 17) Existing/Grading Plan: Per response letter the outlet is an 18" pipe while the plans have it labeled as a 24" RCP. Please update plans.
- 18) Grading Plan: Clearly identify which boxes are proposed for weirs and reference corresponding detail. I do not see note or label as described in the response. It is important to clearly identify which structures are proposed for the weir to assure all runoff is being treated and not bypassing the SCM.
- 19) Retaining Wall Plan: Stormwater layout within plan view differs from other sheets. Please update.
- 20) Details: Where are the Throat Box Dissipaters proposed? These need to be properly labeled on the Grading Plan.
- 21) Details: Provide Trash Guard on all inlet pipes, located within inlet boxes, prior to entering trench system. I do not see where this note has been added. It would help if a label was added to the Infiltration trench layout detail.
- 22) Details: Provide SHWT & Elevations on the Infiltration Trench Section. I do not see where the elevations have been added to the Cross section per response letter.
- 23) Landscape Plan: Please relocate proposed Eagleston Holly from conflicting with Infiltration Gallery B.
- 24) Landscape Plan: Coordinate Trench outfall piping and throat dissipaters boxes with proposed cypress and maple trees.

Condition of Approval:

- 25) Remove proposed Retaining Walls from Right-of-way adjacent to Phase III structures. In order to reduce impact to existing trees the City will not require the sidewalk to be constructed in these areas until commencement of Phase III construction. The City will require the applicant to submit sidewalk construction plans, sealed by an Engineer, for review/approval prior to Phase III construction.

Remove retaining wall and sidewalk from the plans. The plans do not look to be updated from previous submittal.

Re-Submittal Review Cape Fear Solar Systems located at 910 S 2nd St - Site Plan Version 2 -FIRE

Please address the following:

- A hydrant must be within 150' of the FDC (measured as the truck drives for practical use)
This requirement is called out in the FIRE & LIFE SAFETY NOTES

Project Name: **CAPE FEAR SOLAR SYSTEMS [TRC Plan Review #2]**

Pre-TRC Date: **03.23.2021**

Reviewer Name: **Mitesh Baxi**

Reviewer Department/Division: **PDT/Traffic Engineering**

■ **CAPE FEAR SOLAR SYSTEMS [TRC Plan Review #2]**

EXISTING CONDITIONS:

- 1 Reconcile the details of site plan and landscape plan. There are few discrepancies in the details like driveway width, accessible aisle location for handicap space.
- 2 Existing streetlights in the vicinity of this development are not shown accurately. Please revise.
- 3 Please verify if proposed ADA ramp conflicts with an existing stop and street name signs. Clearly label if these signs require relocation. Stop sign shall be in advance of an ADA ramp/potential crosswalk.
- 4 Railroad crossing shall be relocated outside the proposed driveway flare off Wright St. The new location must be coordinated with City Traffic Signs and Markings Manager or supervisor prior to installation.

TECHNICAL STANDARDS:

5. This segment of S Front St is a major thoroughfare [[Chap VII \(C\) \(2\) of CofW Tech Stds](#)]. Driveways along intersection side streets must have corner clearance of 60' measured along the curb line. [[7-13 CofW Tech Stds](#)]. Please coordinate with Engineering for a variance request.
6. Ramps at the corner of an intersection of Dawson St and 2nd St must be connected with sidewalk. Show the connection properly on the plans.
7. Dimension the proposed driveway width of southern driveway off 2nd St. The maximum width of the two-way traffic for a driveway is 30' for 2-lane and 36' for 3-lane at the property line. A pavement marking plan is required only for driveways greater than 30' in width [[page 7-9 CofWTSSM](#)]. Revise the driveway pavement markings to reflect these standards or coordinate with Engineering for a variance request.
8. The portions of sidewalk are proposed at the back of the curb. Please ensure that the cross slope and longitudinal slope of sidewalk are in accordance with [CofW Tech Stds SD 3-10 and ADA standards](#) at the driveway apron. Realign the sidewalk, if required. Coordinate with Engineering for the best possible options.
9. **SIGHT DISTANCE TRIANGLE FOR ANY STREET INTERSECTIONS WITH SAID THOROUGHFARES**
This section of S Front St is a major thoroughfare [[Chap VII \(C\) \(2\) \(a\) of CofW Tech Stds](#)]. The required triangular sight distance for any street intersections with said thoroughfares shall be provided in compliance with the AASHTO sight distance standards [[Sec.18-556 CofW LDC](#)]. Show AASHTO departure sight distance for the street corners of Wright St and Dawson St.
10. Show all the applicable sight distance triangles on landscape plan.
11. Provide the turning movements of the largest vehicle accessing the facility and on a separate sheet.

GENERAL NOTES TO ADD TO THE PLAN:

- A. Street trees must be located a minimum of 15 feet from streetlights. [[CofW SD 15-17](#)]
- B. Any required installation or relocation of traffic signs is the responsibility of the project developer. Please coordinate with City Traffic Signs and Markings Manager or supervisor prior to installation of any traffic signs or markings in public ROW.

Please let me know if you have any questions or if I can be of further assistance.

Project Name: **CAPE FEAR SOLAR**

TRC Date: **03.25.2021**

Reviewer Name: **BILL McDow**

Reviewer Department/Division: **PDT/Transportation Planning**

TECHNICAL STANDARDS:

LANDSCAPE PLAN:

1. The Landscape plan is missing required Sight Distance Triangles. Please show the SDTs along with proposed trees, (especially those adjacent to the driveways) on the landscape plan, then resubmit the plan for review for compliance with sight distance requirements. [SD 15-14 CofW Tech Stds\]](#)
2. The site appears to have placed newly planted trees for the Landscape buffer in the proposed ROW for the NCDOT Transportation Improvement Project U-5734 project area. If this buffer is planted in this location, it appears the acquisition for the U-5734 project will take them away, resulting in an unbuffered condition. Please revise.
3. No Further Comments.