

William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243-1102

PROJECT NAME: Graywood Farms North

DATE REQUESTED:

MEETING LOCATION: Microsoft Teams

PERMIT: SOP-22022

COUNTY: Bradley

DATE HELD: 09/15/2022

MEETING TIME: 1:00 p.m. EST

WPN:

PARTICIPANTS/REPRESENTING: (checklist ITEM I.A)

TDEC DWR:

Michael Bascom (michael.bascom@tn.gov)

Brad Harris, P.E. (<u>timothy.hill@tn.gov</u>)

FOX PE:

Dudney Fox (dudney@foxpe.com)

Chris Strupp

Anastasia Sharp(<u>Anastasia.sharp@tn.gov</u>)

Bryan Pope (bryan.pope@tn.gov)

Ocoee Utility District:

Tim Lawson

Clay Underdown (clayunderdown@yahoo.com)

Buck Owen (buckoud@yahoo.com)

PROJECT BACKGROUND AND PURPOSE: (checklist ITEM B)

Graywood Farms North residential subdivision consisting of 57 homes. FOX PE proposes media filtration treatment and drip subsurface disposal system. The system will utilize a recirculating gravel filter and have an absorption field of 60,000 square feet in three zones. The facilities treatment capacity is calculated to be approx. 19,950 gallons.

SUMMARY OF PRELIMINARY ENGINEERING REPORT CONSIDERATIONS (checklist ITEMS C, D, E):

The project design must adhere to the Division's Design Criteria. FOXPE believes the treatment capacity of the drip filed will be 19,950 using 350 gpd/home. The homes will have 4 bedrooms. TDEC recommends 100 gpd per no. of bedrooms. TDEC will confirm whether 350 gpd per home can be used. FOX PE design uses 0.25 in/sqft loading rate.

SUMMARY OF RECEIVING WATERS OR SITE SUITABILITY: (checklist ITEM F)

The Division has reviewed the background soils information submitted. Based on the soils report, Pits 2, 4, 5, 6, 8, 9, 10, 11, and 12 will have a 0.1 gpd/sqft recommended load rate. Pit 3 needs further clarification from the soil scientist. FOX PE has designed the system with lines on 2-foot centers. Brad Harris pointed out that the rules allow this loading rate but based on the soils report TDEC would advise 0.1in/sqft. TDEC (LAND BASED SYSTEMS) would like to hear back from Mr. Fox on whether they will expand drip field area and what load rate they will use. TDEC (LAND BASED SYSTEMS) would like Dudney Fox to discuss with his soil scientist the ability of the proposed areas to treat wastewater and whether additional areas are advised.

SUMMARY OF ANTICIPATED PERMITTING NEEDS: (checklist ITEM G, I, J, K):

The Water Quality State Operating Permit application has been received, UIC will be authorized with permit issuance. Final permit issuance is contingent upon final plans approval.

DWR ORGANIZER: M|B MINUTES PREPARED BY: M|B DATE MINUTES PREPARED: 09/15/2022



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Planning/Permitting Process



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- 1. PRELIMINARY PROJECT DISCUSSION: The format will be decided based on the complexity of the project. Refer to Wastewater Project Number and Permit number in all correspondence.
- 2. SITE APPROVAL PHASE: Submit SOP Permit application (see instructions at: S including:
 - a. A preliminary engineering report (alternatives evaluation in terms of life cycle costs and permit implications) should be submitted before negotiations for the permit can be completed.
 - b. A soils map prepared by a Licensed Professional Soil Scientist with pit profiles must be submitted in support of the project. The map must be field verified by TDEC staff.
 - c. Ensure treatment schematic on application matches engineering report and preliminary plans to be submitted in preliminary design phase (WW Design Criteria, Chapter 1, Appendices 1-D-2 and -3)
 - d. Agreement stipulating transfer of property or permanent easements for utility access for maintenance and operation of collection system and treatment system.
 - e. Application fee for decentralized systems: see 400-40-11-.02(3) at: https://sharetngov.tnsosfiles.com/sos/rules/0400/0400-40-11.20160508.pdf
- 3. PRELIMINARY DESIGN PHASE: After agreement on draft permit, submit preliminary design submittal consisting of:
 - a. Engineering Report (or Basis of Design or Design Memorandum) in accordance with WW Design Criteria Chapter 1 Appendix 1-D-2; Review of the engineering report primarily focuses on due diligence taken in the characterization of the influent and the selection of an appropriate technology to meet the agreed upon discharge requirements given the influent characterization. Life cycle cost estimates should be upgraded; previously considered alternatives should be omitted or will be disregarded at this point. Treatment processes outside the Design Criteria parameters must be justified with preferably actual data on similar installations. Performance should be examined over the realistic range of influent values.
 - b. Preliminary Plans in accordance with WW Design Criteria Chapter 1 Appendix 1-D-3. Review of the preliminary plans focuses on the process in accordance with the checklists. Preliminary plans may be attachments or figures in the engineering report.
- 4. FINAL DESIGN PHASE: Upon completion successful completion of the public comment period of the permit and approval of the engineering report and the preliminary plans, the final design phase is authorized. The final CD's should consist of:
 - a. Final Plans and Specifications in accordance with WW Design Criteria Chapter 1 Appendix 1-D-4. Note that the primary review emphasis is on those aspects not previously evaluated during the PRELIMINARY DESIGN PHASE: Maintainability, sustainability, operability and flexibility (including the visibility of process parameters to support operator optimization), expandability, and safety.
 - b. Note procurement documentation in the project manual/specifications is generally reviewed for functionality and does not duplicate review procurement requirements, policies, or ordinances of funding agencies or owning public entities.
 - c. Proof of ownership/permanent easements must be provided prior to transmission of wastewater or acceptance of wastewater at a new facility for treatment and disposal.



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d. Note Rules authorize and require the Division to specify the format and content of the submittals. Current versions of the Rules and Design Criteria specify paper submittals. The Division is moving towards accepting and prefers digital submissions. Plans should be able to be legible if printed in 11x17 paper format; documents should be word/phrase searchable. PDF versions will be digitally stamped approved on cover sheets and indices and when reproduced will fulfill the requirements for on-site construction monitoring. A paper copy (red-lined plans) of the contract documents should also be on site to record field changes to ensure an accurate record drawing set can be provided.

5. PERMITTING PHASE

- a. Prior to commencing operation, privately-owned public utilities must provide financial security to the Public Utility Commission to comply with TCA 69-3-122. Issuance of a Certificate of Convenience and Necessity (CCN) by the Public Utility Commission must occur prior to the startup of the facility.
- b. Final plans approval and issuance of the final permit will occur once the financial security provisions have been applied for.

6. CONSTRUCTION PHASE

- a. Notify location environmental field office (EFO) & Nashville Central Office upon:
 - i. Start of construction
 - ii. Start up, final inspection, commissioning
- b. Submit record or "as-built" drawings" if necessary